



WILLINGNESS OF INDONESIAN PUBLIC ON THE VACCINATION PROGRAMME AS AN EFFORT TO PREVENT COVID-19

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ABSTRACT

The number of Covid-19 cases continues to increase, including in Indonesia. One of the efforts made by the Indonesian government to prevent a pandemic is to create and implement a Covid-19 vaccination program for the community. Therefore, the government is trying to urge the public to be willing to carry out a Covid-19 vaccine. This study was conducted to the willingness of the Indonesian public to the vaccination program as an effort to prevent Covid-19. The research method used is a qualitative approach by analyzing subjectively through the literature review method from PubMed, Clinical Key, Google Scholar, and Google Engine in Indonesian or English. The results showed that most Indonesians were willing to be vaccinated. However, there are also Indonesians who refuse to be vaccinated. The reason people refuse to be vaccinated against Covid-19 may be that they have different beliefs about the Covid-19 vaccine because of limited information about the type of vaccine, the availability of the vaccine, and the safety of the vaccine itself. the conclusion is that quite a lot of Indonesian people are willing to receive vaccinations but the government still needs to provide information, knowledge, and education about vaccination programs by involving all parties, both directly and the media so that Indonesian people who refuse or receive vaccines have the same perception or views as people who are willing received the Covid-19 vaccine.

Keywords: *Willingness of Public, Vaccination, Covid-19*



INTRODUCTION

Nowadays, a virus known as Corona Virus or COVID-19 has become a threat worldwide (Mona, 2020). Coronavirus Disease 19 (COVID-19) is a disease caused by Novel Corona Virus (2019-nCoV) or known as Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). This latest virus has not been identified previously in humans. Its occurrence has threatened public health and gains attention from all over the world.

COVID-19 was first identified in December 2019 at Wuhan, Hubei province. It was then spread to the whole of China and, finally, the whole world (Gennaro et al, 2020). The initial symptom of infection by COVID-19 is acute respiratory tract infection such as fever $\geq 38^{\circ}\text{C}$, cough, dyspnea. A chest x-ray may show extensive pneumonic infiltrate on both lungs. Not only mild symptoms, but patients may also experience severe problems such as pneumonia, acute respiratory syndrome, renal failure, and may cause death (KEMENKES Pedoman Covid, 2020).

National authorities informed WHO on 9 June 2020 that more than 7 million were infected by COVID-19 and causes more than 400,000 fatalities (World Health Organization, 2020a). Worldometer stated that COVID-19 global transmission up to 20 May 2021 has been increasing every day. Positive COVID-19 patients were spread in 222 countries with an additional 49,799 patients, making a total of 165,889,188 patients. Total fatalities were 3,446,039 with a 1,582 increase. Cured cases were 146,597,864 and active cases were increased by 15,838,365 (Worldometers, 2021).

The COVID-19 transmission rate in Indonesia was also spiking. Data from COVID-19 Management and National Economy Recovery Committee revealed that until 20 May 2021, an additional 5,797 people were confirmed positive, making a total of 1,758,898, 92.2%. A total of 1,621,572 patients are cured with an added of 4,969 people. However, there were 2.8% (48,887) patients died due to Covid-19, a 218 increase from the total number previously. Covid-19 was suspected in 75,168 people. Fiver percent (88,439) are defined as active cases, an added of 610 patients. On 20 May 2021, several provinces reported new confirmed COVID-19 cases, where the highest was on West Java (1,332 patients). This province also reported the highest cured cases (1,324 patients). The highest fatality was reported by Central Java, 69 patients. However, some area also reported no Corona case on the same day, which are Gorontalo, West Sulawesi, and Papua (“Gugus Tugas Percepatan Penanganan Covid-19,” 2021)



The government has done several efforts to prevent this pandemic, including implementing the Covid-19 vaccination program for the public. The covid-19 vaccine is very safe and most vaccine recipients showed a significant immune response after the first vaccination (Zhu et al, 2020). The community was encouraged to assess the vaccine's effectiveness (Iserson, 2020). Effective Covid-19 vaccine is being developed and was expected to be ready for the public in 2021. Therefore, to facilitate community acceptance, public trust in vaccine safety and efficacy is important (Danchin et al, 2020). Health Minister, Mr. Budi Gunadi Sadikin, stated that vaccination in Indonesia will be divided into two terms. First-term will start from January to April 2021. In this term, vaccines were targeted for 1.3 million health workers, 17.4 million public workers, and 21.5 million elderly in 34 provinces. For the elderly aged 60-year-old or above, vaccination will be given after safety information for that age group is obtained. The second term is scheduled from April 2021 to March 2022 for 63.9 million people with a high risk for transmission based on residency, or economic and social level. After that, 77.4 million people with a clustered approach based on vaccine availability (Fundrika, 2021). The covid-19 vaccination program is expected to produce immunity in the vaccine recipient. However, the process may need some time. Each individual needs two doses, given a few weeks apart.

Vaccination is defined as the administration of a vaccine into someone's body to stimulate immunity to virus or disease by triggering antibody production (Chowdury et al, 2020). Health Minister Regulation No. 84 the Year 2020 on Vaccination implementation aim to lower Covid-19 transmission rate, decrease mortality or morbidity number due to coronavirus, achieve personal immunity and herd immunity, keep a healthy community, increase health system comprehensively, and protect and minimalize the effect on society and economy. Indonesian Health Minister Regulation on Vaccine type for Coronavirus disease 2019 vaccination program described 6 types of vaccines that will be used in this vaccination program in Indonesia, which are vaccines produced by Bio Farma (Persero), Astra Zeneca, China National Pharmaceutical Group Corporation (Sinopharm), Moderna, Pfizer Inc., and BioNTech, and Sinovac Biotech Ltd. Vaccine. Indonesia Health Minister Regulation on target recipient of Coronavirus disease 2019 (Covid-19) divides groups that needed to be prioritized which are elderly, public workers, and health workers. General Director of Disease Prevention and Control Regulation on technical guidance vaccination program in Corona Virus Disease 19 (Covid-19) Pandemic Prevention stated that Covid-19 vaccination program includes several agenda, such as planning on utilities, target, budget, vaccine distribution



and logistics management, implementation, agreement, documentation, and reporting, communication strategies, observation, and prevention vaccination side effects, and will be used as a standard in monitoring and evaluation. On 6 October 2020, The President of Indonesia, Mr. Jokowi, signed and issued Presidential Regulation (Perpres) on vaccine procurement and vaccination program to overcome the Covid-19 pandemic. Perpres stated that government will prepare vaccine procurement and distribution, also vaccination program implementation. Perpres assign Bio Farma, a government pharmacy company, to procure vaccines through agreement with several international institutions. This Perpres also defined the Ministry of Health to regulate vaccine distribution and national vaccination programs (PerPres No 99, 2020). Based on data from WHO, from January to March 2021 there is more than 6 million vaccine dose was administered to Indonesian people. However, this number is still far from the Indonesian total population. Therefore, socialization and information spread on the importance of the Covid-19 vaccine must be continued. The most important part of information spreading is that the information source must be accurate, relevant, and on time (Multanto, 2009).

The number of Covid-19 cases in Indonesia is still increasing. Due to that, people are willing to be vaccinated to help the government in Covid-19 prevention. Thus, arises the study question how willing is the Indonesian public to vaccination program to prevent Covid-19? Based on these problems mentioned, this article aims to describe the Indonesian community's enthusiasm for the vaccination program to prevent Covid-19.

METHODS

This article used a qualitative approach aim to explain with analyzing literature from several sources that can be obtained, such as books, documentation, magazine, articles, journals, ebooks, the internet, and other documents relevant to this problem. A literature review is an explanation of theories, findings, and other study materials from sources to organize a clear framework of the research question.

The study design was a literature review on articles published between 2020 and 2021. The population was people willing and not willing to be vaccinated. Literature findings use scientific data such as Pubmed, Clinical Key, Google Scholar, and Google Engine in Indonesian or English. Keywords are public willingness, vaccination, and Covid-19. Finding results were then chosen depends on the title that matched this study article theme.



RESULT AND DISCUSSION

A survey was done in Dukuh Manunggal, Surabaya, revealed around 81.1% of the total community agreed on vaccination. These people believed in the Covid-19 vaccine efficacy to stimulate the immunity system and its ability to counter the disease. On the contrary, there are 18.9% population disagree with vaccination where 56.8% express their fear of side effects; 21.6% doubted the vaccine's efficacy, 16.2% were not sure about its safety, and 5.4% did not believe in Covid-19 vaccines. Among all those reasons, the highest was public fear of the vaccine's side effects (Febriyanti Noer et al, 2021). Negative rumors on vaccines generate a group that is not willing to be vaccinated, such as a rumor mentioning death after the Covid-19 vaccination. In reality, the person died due to a heart attack and not due to vaccination because he was never vaccinated (Sukmasih 2020).

Research on Central Sulawesi revealed 79.3% population was confident in the Covid-19 vaccine's safety and efficacy; however, only 35.3% of the population was willing to be vaccinated. About 64.7% population was not inclined to be vaccinated with 11.7% feels it is not safe, 4.9% feared it is ineffective, 13.5% were afraid of the side effects, and 1.1% population stated it is conflicted with religion. Public trust in the Covid-19 vaccine's safety and efficacy is quite good. However, groups that did not trust Covid-19 vaccine safety and efficacy needed socialization with a religious and scientific approach (Ichsan DS et al, 2021). In French, 75% of people were willing to be vaccinated. In Malaysia, 74% of people were doubtful of the Covid-19 vaccine's safety and effectiveness (Chew P, 2021). In the USA 69% of people were concerned about the safety and efficacy of the Covid-19 vaccine (Reiter PL et al, 2021), and in UEA 64.7% were also worried about it. Society groups that are enthusiastic to be vaccinated are those aged 60-year-old or more, married, postgraduate or higher, and work in the governmental sector (Al Mohaithef and Padhi BK, 2021).

Based on the study in Southeast Sulawesi, most people (66.2%) agreed to be vaccinated, and only 33.8% were not willing to be vaccinated due to various reasons. One of the reasons was the skepticism on Covid-19 vaccine presence (Tasnim T and Herianto M, 2020).

According to data from the Ministry of Health and the Indonesian Technical Advisory Group on Immunization (ITAGI) released in October 2020, 7.6% population refuse to be vaccinated and 26.6% were still undecided (Sukmasih, 2020).



National data from the Indonesian Politic Indicator (IPI) survey committee stated 54.9% population agreed to be vaccinated, while 41% population refused (kompas.com). Not only IPI, but also a survey done by the Ministry of Health along with the Indonesian Technical Advisory Group on Immunization (ITAGI) supported by UNICEF and WHO revealed 65% population are willing to receive Covid-19 vaccination is provided by the government, 8% refused, and 27% are in doubt of government plan on distributing Covid-19 vaccine. Limited information on vaccine types, availability, and safety may cause people to refuse vaccination. The result of surveys done by those institutions verifies many people still do not understand the government's regulation on Covid-19 vaccination. This problem needs to be addressed so that people against vaccination have the same thoughts as those who agreed to be vaccinated (Carolina M and Agustiani FN, 2021).

Not all groups of society can be vaccinated immediately. This statement came from a letter from the General Director of Diabetes and Cardiovascular Diseases Prevention on Covid-19 Vaccine Implementation stating diabetes and cardiovascular diseases affected many people where this metabolic disorder is caused by hyperglycemia. Diabetic patients may be vaccinated if there is no acute complication (Sari, 2016; Mukti, 2019; Kemenkes, 2021).

The vaccine used in Indonesia to prevent Covid-19 has undergone levels of a clinical trial in several countries is Sinovac. Interim analysis from the final-stage clinical trial in Turkey and Indonesia has proven that the vaccine is effective for 91.25% and 63.50%, respectively. Researchers from Brazil said initially that clinical trial on Sinovac effectivity is around 78%, but it was revised in January 2021 to be 50.40%. Sinovac was appointed for emergency use on high-risk populations in China in July 2020, and in September 2020 Sinovac has been administered to 1,000 volunteers where less than 5% reported being uncomfortable or fatigue. This vaccine's privilege is that it did not have fatal consequences (Purnamasari and Raharyani, 2020).

CONCLUSION AND SUGGESTIONS

This research article concluded that most of the Indonesian population is willing to be vaccinated for Covid-19. However, some of them refused due to fear of its side effect, efficacy, safety, and its availability. Due to the result, writer recommend several points:

1. Government: socialization, counseling, and education from the government are needed. These socializations need to involve every party, done either directly or through media, on



the aim and advantages of vaccination. They should involve public and religious figures, mentioning vaccine aim and content, so that those refusing to be vaccinated have the same perception and view as those accepting. The government is expected to accelerate procurement and distribution of the vaccine; therefore, the population did not have to wait for long. A suitable and safe vaccine for children less than 18-year-old is expected.

2. Community: Public role and readiness are important. Covid-19 vaccination is organized to protect themselves. The general public is expected to seek, give, or receive information about Covid-19 vaccination smartly so that there will be no misinterpretation and harmful consequences especially to people around them.
3. Researchers: develop this article from a public preparedness point of view on this government vaccination program and other Covid-19 prevention programs.

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