HEALTH AND EDUCATION COUNSELING FOR COVID-19 VACCINATION IN DERMATOLOGY

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ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been the cause of the Covid-19 pandemic in Indonesia since December 2019. As an effort to prevent the spread of Covid-19, the vaccination program has been implemented. Vaccination is a process in the body where a person becomes protected and to reduces the severity of diseases. Based on PERDOSKI recommendation 2021 for Covid-19 vaccination, several types of skin diseases need to be considered about the Covid-19 vaccine. By this time, hoaxes and misleading information about the Covid-19 vaccine had been spread widely. Adolescents are the target demographic of Covid-19 vaccination. With correct and adequate knowledge about the Covid-19 vaccine, they can invite their families and communities who have skin diseases around them to participate in the vaccination of Covid-19.

Keywords: Covid-19, vaccination, education, adolescents, dermatology

INTRODUCTION

Vaccination is the act of introducing a vaccine into the body to produce immunity to a specific disease.[1] A vaccine is a biological product containing antigens in the form of microorganisms or their parts or the substances they produce that are processed so that they are safe.[1,2]Vaccine induces a person to have actively specific immunity for certain diseases. Vaccines encourage the formation of specific immune systems to avoid severe disease. There is no definitive cure for Covid-19. The safe and effective Covid-19 vaccine and 5M behavior (wear a mask, washing hands with soap, maintaining distance, stay away from the crowd, and limit mobility) are defensive efforts that we can do to avoid Covid-19 disease.[1]

Vaccination has the role of protecting the body against specific pathogens. Vaccines are biological products that are given to a person to protect against debilitating and even life-threatening diseases.[2] Vaccines stimulate the formation of immunity against certain diseases in a person's body. The body will remember the disease-carrying virus or bacteria, recognize and know how to fight it.[2]

The vaccine aims to form group immunity finally. Group immunity or herd Immunity is a situation where most communities are protected / immune to certain diseases that cause indirect effects, namely protecting vulnerable community groups that are not targets for vaccination. This condition can only be achieved with high and even vaccination coverage.[3,4]

The vaccination aims to break the chain of disease transmission and stop outbreaks and eliminate even the disease itself in the long run.[3,5] Indonesia has a long history of tackling infectious diseases through vaccination or immunization. Indonesia contributes to the prevention of disease through vaccination.[6] For example, since the first smallpox immunization was declared in 1956, finally smallpox can be treated, namely eradicated or eliminated worldwide in 1974 until the implementation of measles immunization stopped in 1980. Just like polio, since polio immunization first launched in 1972, Indonesia finally reached polio-free in 2014.[5]. Currently, the world, including Indonesia, is eradicating polio targeted in 2023. Another example of Indonesia making efforts to immunize tetanus toxoids in pregnant women, Indonesia finally achieved maternal and neonatal tetanus elimination status in 2016.[5,6]

Vaccination is helpful to provide specific immunity to a certain disease so that if exposed back to the disease, it will not be sick or only experience mild pain.[4] If a person does not undergo vaccination, he will not have specific immunity to diseases that can be prevented by

vaccination. If vaccination coverage is high and evenly distributed in an area, herd immunity will be formed.[5]

Based on PERDOSKI recommendation 2021 about Covid-19 vaccination, several conditions of skin diseases can receive the Covid-19 vaccine. A person with skin inflammation with Body Surface Area (BSA) >30% and chronic recurrent autoimmune skin diseases must be considered to receive the vaccine.

Children who are not immunized are protected by people around them who have been immune to certain diseases so that the risk of contracting the disease from the surrounding people becomes small. It shows that immunization with high and even coverage is critical. However, suppose one day the child is out of the region. In that case, the child risks contracting the disease because, basically, they do not have the specific immunity obtained from immunization.[5]

DISCUSSION

Covid-19 Vaccination Targets

The priority group of vaccine recipients is the population domiciled in Indonesia and aged ≥ 12 years. The population under the age of 18 is vaccinated if adequate vaccine safety data and emergency use authorization (NIE) is available from the Food and Drug Administration.[4]

The stage of the implementation of Covid-19 vaccination in 4 stages, taking into account the availability, time of arrival, and implementation of Covid-19 vaccination, is carried out as follows:

Phase 1, vaccination time implementation January-April 2021 with the target of health workers, health assistants, support personnel, and students who are undergoing medical profession education working in Health Care Facilities.[4,6]

Phase 2, vaccination implementation of January-April 2021 with the aim of public service officers are the Indonesian National Army/State Police of the Republic of Indonesia, law enforcement, and other public service officers who include officers at airports/ports/stations/terminals, banks, state power companies, and drinking water regional companies, as well as other officers directly involved in providing services to the community.[6]

Phase 3, with an implementation time of April 2021-March 2022, targets vulnerable communities from geospatial, social, and economic aspects.[6]

Phase 4, with implementation time of April 2021-March 2022 with the target of the community and other economic actors with a cluster approach according to the availability of vaccines. The determination of the priority group of vaccine recipients is carried out by taking into account the ROADMAP of the WHO Strategic Advisory Group of Experts on Immunization (SAGE) and a review from the Indonesian Technical Advisory Group.[6]

COVID-19 vaccination services carried out in health care facilities owned by the central government, provincial government, district/ city local government, or community/ private property that meets the requirements, including:[6]

1. Puskesmas
2. Clinic
3. Hospital
4. Health Services Unit at the Port Health Office (KKP)

There are several criteria of these individuals or groups should not be immunized Covid-19:[4,6]

a. People who are sick should not undergo vaccinations unless they have the treating doctor's approval.
b. Have a disease. People with uncontrolled accompanying diseases such as diabetes or hypertension are advised not to receive the vaccine. Therefore, before the implementation of vaccination, everyone will be checked for body condition first. Those with comorbid diseases must be under controlled conditions to get vaccination approval from the treating doctor.
c. Not age-appropriate as recommended by the government, people who get the Covid-19 vaccine are over 12 years of age. That is, those outside the group, such as toddlers, should not receive the vaccine.

Based on PERDOSKI recommendation 2021 about Covid-19 vaccination, several types of skin diseases can receive the Covid-19 vaccine. Such as atopic dermatitis with SCORAD<25, vitiligo, cosmetic dermatology, urticaria (unless chronic idiopathic urticaria), Morbus Hansen (BSA<10%), and rare skin diseases. The other skin conditions need observation carefully after vaccination: such anaphylactic (not to Covid-19 vaccine), history of drug eruption and DRESS (resolved > four weeks), atopic dermatitis with SCORAD>25, psoriasis, Morbus Hansen with corticosteroid therapy, history of Herpes Simplex,

autoimmune skin diseases with remission on therapy, skin carcinoma, HIV-AIDS on therapy, cell mast abnormality accompanied with mastocytosis. Skin conditions that are not recommended to receive Covid-19 vaccine: long term use of corticosteroid (>2 weeks, with prednisone >20 mg), has severe drug eruption, active and uncontrol autoimmune disease, abnormality of blood vessels, cutaneous lymphoma, Morbus Hansen with reaction, pyoderma gangrenosum, staphylococcal scalded skin syndrome, deep mycosis, herpes simplex, and herpes zoster need to postpone the vaccination until one month after remission.

Until now, clinical trials of the Covid-19 vaccine conducted on healthy people. Experts recommend immunizing targeted patients with comorbid diseases such as controlled autoimmune diseases. While targets have uncontrolled risk factors, they are still awaiting recommendations from the relevant expert college.[6]

Myths about the Covid-19 vaccine:[1,6]

1. Vaccines make us infected with coronavirus

The first myth about the Covid-19 vaccine is that the vaccine makes us infected with the coronavirus. This myth is wrong. Vaccines strengthen the immune system to recognize and fight disease without actually causing infection. For example, the Covid-19 vaccines made by Moderna and Pfizer contain strands of genetic material called messenger RNA, or mRNA. When mRNA enters the body's cells, it instructs the cell to trigger a "surge" of proteins present in the coronavirus. That piece of protein does not harm the body, but it can trigger the immune system to boost its response against it. The response usually triggers fatigue, muscle pain, headache, or fever. These effects are usual and are a sign that the immune system is responding well to vaccines.

2. The process of making vaccines is too fast, so that it is dangerous

The myth about the second Covid-19 vaccine is that making vaccines is too fast to endanger health. The first vaccine for Covid-19 did involve new technologies and was developed in a short period. However, that does not mean the Covid-19 vaccine is not effective against the disease. Although this type of vaccine was first used widely in vaccines for the public, researchers have worked on this vaccine strategy for more than three decades. The Covid-19 vaccine has also passed rigorous clinical trials. Because many people are infected with Covid-19, it only takes a few months to gather enough data to make an initial evaluation in a conis test. The clinical trial has also passed careful research from several independent health experts and institutions.

3. The main ingredient of the vaccine is very suspicious and contains a microchip

The myth about the third Covid-19 vaccine is the main ingredient in making suspicious vaccines or contain microchips. Some people believe that vaccines contain microchips or tracking devices that can spy on our activities. The main ingredient of the vaccine is mRNA or DNA to trigger protein spikes. Both vaccine ingredients also contain lipids (fats) that help deliver mRNA into cells and several other common ingredients that help maintain the pH and stability of the vaccine.

CONCLUSION

Vaccination and appropriate information for adolescents can improve the Covid-19 vaccination program to reduce the incidence of Covid-19 in South Sumatra, especially Palembang.

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