

## ORIGINAL ARTICLE

# Knowledge Survey of Coronavirus Disease (Covid-19) Prevention and Vaccination in Sukabumi, West Java, Indonesia

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## ABSTRACT

**Introduction:** WHO (World Health Organization) has declared the condition of the coronavirus disease (Covid-19) pandemic since February 2020. People do not know about coronavirus disease (Covid-19), and they feel anxious about the transmission of the disease. The research objective was to determine public knowledge about coronavirus disease (Covid-19) and coronavirus vaccines. **Methods:** This research method used a survey of the people in Sukabumi, West Java, Indonesia. Data collection techniques using a questionnaire through the google form application. The number of respondents was 126 people. **Results:** The results showed 43.7% of the public were waiting for the presence of the coronavirus disease (Covid-19) vaccine, 30.2% expressed doubts about the production of the covid-19 vaccine, 21.4% did not know about the Covid-19 vaccine. About 45.2% of the people stated that the covid-19 vaccine was safe, 42.9% of the people said they were confused about the vaccine and 7.9% of the people said they were unsure. About 40% of the public knows about the prevention of the covid-19 virus by using a mask, 35% of the public expresses doubts about using a mask and 25% of the people do not believe in using masks. It seen that 39.7% of the people stated that they were ready for vaccines and 36.5% of people expressed doubts about vaccines and 15.9% of the people were not ready for vaccines. **Conclusion:** The results of this study indicate that public knowledge about coronavirus prevention and coronavirus vaccines is good in Sukabumi area.

**Keywords:** Knowledge, Coronavirus Disease (Covid-19), Covid-19 vaccine

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## INTRODUCTION

The Vaccination Program that is being implemented by the Indonesian government has received different responses from its citizens. The initial response showed that respondents were feeling frightened of receiving the vaccine and the second response was feeling good about getting the vaccine. This is very natural because this type of corona vaccine has only been discovered for the first time. According to the results of a survey conducted by WHO, UNICEF and the Ministry of Health, respondents who had low economic status had the lowest level of knowledge regarding vaccines. This is likely due to the lack of information about the Covid-19 vaccine (1). People with high economic status have more knowledge about the Covid-19 vaccine. Various studies in the US, UK and Indonesia found that more than 50-60% of the population is willing to

be vaccinated (2). Recommendations from health care providers show that the safety of vaccines is guaranteed, does not endanger health, minimal side effects, and the effectiveness of vaccines has been tested based on clinical evidence. According to the associate researcher of the Political Psychology Laboratory of the University of Indonesia said that while responding to doubts about the coronavirus disease (Covid-19) vaccine, the Faculty of Psychology said that the public felt confused about information coming from groups who dislike vaccines and groups that like vaccines. Both groups also include a variety of compelling research evidence. Moreover as many types of vaccines are ready for distribution adds to the confusion of the community (3).

The Sukabumi region consists of two regions, namely the City and the District of Sukabumi. Sukabumi City is a small city in West Java, Indonesia and the second largest Sukabumi district in West Java (4). Based on data from the Sukabumi city task force in March 2021, the number of confirmed cases was 3529. Data of the results survey knowledge of Covid-19 prevention and public acceptance of the Covid-19 vaccine in Sukabumi has not been found.

**MATERIALS AND METHODS**

This type of research is a descriptive study with 126 respondents. Data collection was done by using the google form application techniques. The questionnaire was distributed through the application. Inclusion criteria consisted of respondents aged between 18 to 59 years and respondents residing in the Sukabumi area. This research work got ethical approval (ETHICAL CLEARANCE No. 252/III.7/C/2021) from the research ethics committee of the Muhammadiyah Sukabumi University Faculty of Health, after reading and reviewing the research proposal.

**RESULTS**

Respondents based on gender showed 60.3% male and 39.7% female. The data showed that the male respondents were more interested in participating in the survey (Table I). The number of respondents based on the last education degree is that most of the respondents were senior high schools pass and the least were from Primary school.

**Table I: Number of respondents by gender and Education level**

Variables	Results	Percent
Gender		
Male	76	60.3 %
Female	50	39.7 %
Education		
Primary School	14	11.2
Junior High School	21	16.6
Senior High School	52	41.3
College	39	30.9

Table II shows that 43.7% of the public were waiting for the coronavirus disease (Covid-19) vaccine, 30.2% expressed doubts about the coronavirus disease (Covid-19) vaccine, 26% did not know about the coronavirus disease (Covid-19) vaccine. The public is aware of the dangers of the coronavirus disease, but they are afraid of contracting the disease. So, they are waiting for the vaccine. According to the results of research by Fitria and Ildil (2020), teenagers' anxiety during the Covid-19 pandemic is in the high category, namely 54% (5).

**DISCUSSION**

Respondents who stated that they were ready to give vaccines were 39.7%, expressed doubts about giving vaccines by 36.5% and were not ready for vaccines by 23.8%. Based on the information from the Populi Center that the public's doubts about the coronavirus vaccination

**Table II: Survey Results**

Question	Results n (5)		
	Yes	Doubtful	No
Are you really looking forward to the presence of the COVID-19 vaccine	55 (43.7)	38 (30.2)	33 (26)
Are you ready to be given the covid-19 vaccine?	50 (39.7)	46 (36.5)	30 (23.8)
Do you think the COVID-19 vaccine is halal and safe?	57 (45.2)	54 (42.9)	15 (11.9)
Do you know how to prevent Covid 19	50 (40)	44 (35)	32 (25)

program were due to lack of information related to the vaccine to prevent coronavirus disease (Covid-19). Regarding people's attitudes toward vaccination, the number of respondents reached 1,000 from 100 districts and cities proportionally among 32 provinces in Indonesia. The results of another study showed that 40% of respondents were unwilling to accept the Covid-19 vaccine from the government, while 60% said they were willing. Fear of adverse effect of vaccination was cited. Among these 46.5% did not want to receive the Covid-19 vaccine, followed by 15.2% who did not believe that the vaccine could prevent transmission and 13.3% questioned its halalness (6).

Then the results of the next study showed that the community stated that 45.2% of the Covid-19 vaccine was in the halal and safe category, 42.9% of the people expressed doubt and 11.9% of the people said that they were unsure. Public doubt about the vaccine is probably because the vaccine is still in the clinical trial stage. The research result analysis from social media twitter by Rachman and Pramana (2020), showed that the public gives more positive responses to the discourse of giving the vaccine (30%) compared to the negative response of 26% (7).

The COVID-19 type Sinovac vaccine was used in the first vaccination program in Indonesia on January 13, 2021. The Sinovac COVID-19 vaccination strengthens the immune system, allowing antibodies to combat the Coronavirus. The body can learn to detect the virus that causes COVID-19, SARS-COV-2, after being vaccinated, reducing the chance of serious infection. Two doses or injections are required for this vaccine (8).

Questions related to the coronavirus disease (Covid-19) were obtained as many as 40% of respondents knew about the prevention of coronavirus disease (Covid-19) by using masks, 35% of the public expressed doubt about using masks and 25% of people did not believe in using masks. This is in line with the fact that N95 masks and surgical masks have an efficacy of more than 90%. A 3-layer fabric mask is the sort of cloth mask that is recommended (outer layer of non-absorbent material, such as polyester or polyester blends, the inner layer of absorbent material, such as cotton, the middle layer of non-woven material, such as polypropylene, and the

outer layer of absorbent material, such as cotton) (9). Regarding the question of knowledge about the prevention of coronavirus disease (Covid-19), 76% of respondents were in a good category and 24% were in the poor category. This is according to the research data of Purnamasari and Raharyani, (2020) showing that the knowledge of the people of Wonosobo Regency about Covid 19 is in the Good category (90%) and only 10% is in the sufficient category and the behavior of the people were aware regarding methods of Covid-19 prevention, such as using masks, hand washing habits and physical or social distancing, which showed good behavior as much as 95.8% and only 4.2% of the people behavior were average (10).

## CONCLUSION

The results of this study indicate that public knowledge about coronavirus prevention and coronavirus vaccines is good in the area in Sukabumi. The study shows the importance of providing effective, well-organized, and continuous information to the public through appropriate platforms to increase awareness about COVID-19 precautions. Moreover, as the respondents were willing to get vaccinated, this finding can help for future efforts to increase acceptance of vaccine that may eventually lead to herd immunity against COVID-19.

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