

Research Article

Community Knowledge of and Attitudes Towards the Implementation of Health Protocols to Prevent COVID-19

Irpan Ali Rahman*, Dedi Supriadi, E. Khoridatul Fadilah, Rudi Kurniawan, Elis Novianti, Ima Sukmawaty and Heni Marliany

STIKes Muhammadiyah Ciamis, West Java, Indonesia

ORCID

Irpan Ali Rahman: <https://orcid.org/0000-0001-9206-0278>

Abstract. COVID-19 is an infectious disease that attacks the respiratory tract. Its spread is so fast that all countries in the world have contracted this disease. As of the time of writing, in the world there are an estimated 69 million positive cases. In Indonesia, in 2020 there were 605,243 confirmed cases. West Java occupied the 4th position in number of cases in Indonesia with 64,072 confirmed cases. Meanwhile, in the Garut Regency area, there were 2,641 confirmed cases from different sub-districts, one of which is Malangbong District. This study aimed to determine the relationship between the knowledge and attitudes of the community towards implementing health protocols in efforts to prevent COVID-19 in Sakawayana village. This research used a descriptive correlation method with a cross-sectional approach. 98 people in Sakawayana village (which has a population of 5,329 people) were recruited through purposive sampling. The results of this study indicated that 78 people (79.6%) had a good level of knowledge, 55 people (56.1%) had a positive attitude, and 78 people (79.6%) appropriately applied the health protocols. There was a relationship between knowledge and attitudes of the community towards implementing health protocols in efforts to prevent COVID-19 in Sakawayana village, with a p-value < 0.05.

Keywords: attitudes, health protocols, knowledge

1. Introduction

Coronavirus disease 2019 (COVID-19) is a new type of infectious disease and was first discovered in December 2019 in Wuhan, China (1). This virus can cause mild to severe respiratory tract infections, lung infections and death (2). There are several diseases caused by coronavirus, namely Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS) and COVID-19 (3).

The COVID-19 outbreak was declared a pandemic by the WHO in early 2020. The rapid spread of the virus has caused almost all countries in the world, including Indonesia, to have contracted the COVID-19 disease. On December 11, 2020, there were 220 countries in the world with 69 million confirmed positive cases and 1.5 million deaths (4). The first case in Indonesia occurred on March 2, 2020 in Depok. Initially

Corresponding Author: Irpan Ali Rahman; email: van.vinnot@gmail.com

Published: 7 February 2022

Publishing services provided by Knowledge E

© Irpan Ali Rahman et al. This article is distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the IVCN Conference Committee.

OPEN ACCESS

there were 2 cases in Indonesia, but because the government was not quick enough in handling them, the cases continued to increase every day (5).

This study was conducted to determine the relationship between community knowledge and attitudes towards the application of health protocols to prevent COVID-19 in Sakawayana Village.

Knowledge is the result of knowledge from information that is known and has been previously studied by using senses such as sight, smell, hearing, touch, and taste (6).

According to (Notoatmodjo, 2011) knowledge is very important to determine behavior and actions to be taken so that people must understand, recognize and learn about objects or information that has been received. Good information about health will influence people to take preventive measures to stay healthy (7). On the other hand, lack of information will affect the lack of preventive measures to always stay healthy (8).

According to (Rachmani et al, 2020) attitudes can be influenced by good knowledge, thoughts, beliefs, and emotions. Good knowledge will form good beliefs, emotions and thoughts so that they will form good actions, including in preventing the transmission of COVID-19.

COVID-19 can be transmitted through close contact and droplets of someone who has been infected when coughing or sneezing (9). Common symptoms include severe flu, fever $>38^{\circ}\text{C}$, runny nose, dry cough, difficulty breathing, sore throat and headache. If not treated immediately this virus will be fatal, and even cause death (10).

Indonesia has made various preventive efforts, starting from regional quarantine, social restrictions, and having to implement several health protocols. The health protocol is a rule made by the government for the public to be able to carry out activities outside safely during the COVID-19 pandemic, prevent transmission of COVID-19 and minimize confirmed cases of COVID-19 (11). The health protocol consists of wearing a mask, washing hands with soap and keeping a distance.

The mask serves to protect breathing from dust or larger particles entering the respiratory tract (12), When washing hands, it is recommended to use soap and running water or use an alcohol-based antiseptic / hand sanitizer (13), and try to avoid crowds or jostle with people around to avoid droplets, but if this is not possible then use a mask when in a crowd (11).

According to research conducted by (14) regarding the description of public perceptions about COVID-19 prevention, it is stated that using masks is very effective for preventing the transmission of COVID-19. according to (15) prevention of the spread

of COVID-19 can be done by community, namely by understanding the dangers of COVID-19 and taking anticipatory actions to prevent transmission.

Islam has long taught how to prevent the spread of the plague by quarantine so it doesn't spread widely (16).

In Sakawayana Village, Malangbong-Garut District, there are still many residents who lack discipline in implementing health protocols. The results of interviews that have been conducted by researchers to some residents, some residents say that wearing masks makes it stuffy and congested, and it is difficult to keep their distance from people around them, especially when shopping at the market. There are still many residents who do not use masks and do not keep their distance when going out, including to traditional markets so that researchers are also interested in examining whether there is a relationship between knowledge and public attitudes towards the application of health protocols to prevent COVID-19.

2. Method

The design used in this research is a descriptive correlation with the cross-sectional approach. Where in solving the problem the researcher wants to identify the relationship between knowledge and public attitudes towards the application of health protocols in Sakawayana Village, Malangbong District, Garut Regency. The population in this study is the community of Sakawayana Village as many as 5,329 people. Sampling was done by using purposive sampling. The inclusion criteria in this study are: People who have gadgets, are able to operate google forms, and are willing to be respondents. Exclusion criteria are: People who have obstacles at the time of research, People who withdrew at the time of the research. Sampling was done by using purposive sampling. The number of samples in this study was 98 people. By using the formula according to Slovin : $n = \frac{N}{1+N(d^2)}$: Information : N = Population size, n= Sample size, d= Percentage of inaccuracy due to sampling error.

$$n = \frac{5.329}{1 + 5.329(0,1)^2}$$

$$n = \frac{5.329}{54.29}$$

$$n = 98,1 \text{ rounded to } = 98$$

Data collection was carried out by distributing questionnaires in the form of a google form link which was distributed through the WhatsApp application to all respondents.

TABLE 1

Variable	Measuring instrument	How to measure	Measuring results	Scale
Dependent				
<i>Implementation of Health Protocol</i>	Questionnaire	Respondent were given 10 questions	Good if the question is answered correctly > 76%. Enough if the question is answered correctly 56%-75%. Less if the question is answered correctly < 55%	Ordinal
Independent				
<i>Knowledge</i>	Questionnaire	Respondent were given 10 questions	Good if the question is answered correctly > 76%. Enough if the question is answered correctly 56%-75%. Less if the question is answered correctly < 55% (17)	Ordinal
<i>Attitude</i>	Questionnaire	Respondent were given 10 questions	Favorable if the score mean Unfavorable if the score < mean (18)	Nominal

TABLE 2: Frequency distribution of Respondents' Knowledge Regarding health protocols in the effort to prevent COVID-19

Knowledge	Frequency	Percent
Good	72	73,5
Enough	22	22,4
less	4	4,1
Total	98	100,0

There are two variables used in this study, namely the independent variable (independent) and the dependent variable (dependent). The independent variables (independent) in this study are knowledge and attitudes, while the dependent variable is the application of health protocols.

Bivariate data analysis was carried out by testing the hypothesis using the chi square test. to test the relationship between two variables, namely each independent variable and the dependent variable. Then the response results are processed using SPSS and data analysis is presented in the form of frequency.

3. Results

TABLE 3: Distribution of the frequency of respondents' attitudes towards the implementation of health protocols in the effort to prevent COVID-19

Attitude	Frequency	Percent
Positive	55	56,1
Negative	43	43,9
Total	98	100,0

TABLE 4: Distribution of the frequency of application of respondents' health protocols in the effort to prevent COVID-19

Implementation of health protocols	Frequency	Percent
Good	78	79,6
Enough	16	16,3
Less	4	4,1
Total	98	100,0

3.1. Univariate Analysis

The table above shows that the knowledge of the community in Sakawayana Village shows that most respondents have good knowledge as many as 72 people (73.5%).

The table above shows that the attitude of the community in Sakawayana Village shows that most respondents have a positive attitude as many as 55 people (56.1%).

The table above shows that most of the respondents applied the health protocols well, as many as 91 people (92.9%).

3.2. Bivariate Analysis

The table above shows that most of the respondents in this study had good knowledge with the application of appropriate health protocols good as many as 63 people and based on the results of the chi square test obtained p value = 0.000.

The table above shows that the attitude of the community towards the application of health protocols obtained the most results, namely a positive attitude having a good

TABLE 5: Relationship of knowledge to the application of health protocols in the prevention of COVID-19

		Implementation of health protocols				p value
		Good	Enough	Less	Total	
Knowledge	Good	63	9	0	72	0,000
	Enough	15	7	0	22	
	Less	0	0	4	4	
	Total	78	16	4	98	

TABLE 6: The relationship between attitudes towards the application of health protocols in the prevention of COVID-19

		Implementatio of health protocols			Total	p value
		Good	Enough	Less		
Attitude	Positive	50	5	0	55	0,004
	Negative	28	11	4	43	
Total		78	16	4	98	

application of health protocols, namely 50 people and based on the results of the chi square test, p value = 0.004.

4. Discussion

4.1. Public knowledge about health protocols in the effort to prevent COVID-19

The results of this study indicate that public knowledge about health protocols in the effort to prevent COVID-19 in Sakawayana Village has the highest frequency in the good category. This is because there is a lot of information that is easily obtained from television, the internet and other media that the government has tried so that the public can find out how to prevent COVID-19.

Knowledge is the result of information that has been known through the senses. Good knowledge in this research is people who have insight or understanding that includes understanding, causes, signs and symptoms, impacts, modes of transmission and some prevention efforts.. While sufficient knowledge in this study can be interpreted that respondents who have sufficient understanding are people who have insight into the meaning, signs and symptoms, modes of transmission and prevention efforts. Lack of knowledge in this research is people who have an understanding which is less about understanding, signs and symptoms and prevention.

Good knowledge about COVID-19 prevention efforts will influence the community regarding prevention efforts that must be done. This is supported by research conducted by (19) which states that high knowledge about COVID-19 affects the incidence of transmission and prevention of COVID-19.

Good knowledge is very important for everyone to have because knowledge can determine good behavior so that the incidence of COVID-19 transmission does not continue to increase.

4.2. The attitude of the community towards the application of health protocols in the effort to prevent COVID-19

Based on research on attitudes towards the application of health protocols to prevent COVID-19 in Sakawayana Village, it was found that most of the respondents had a positive attitude. This respondent's attitude is influenced by the respondent's good knowledge because knowledge is an important thing that will determine a person's attitude or behavior.

This is in line with research conducted by (19) which states that most respondents have a positive attitude as many as 53 people (85.5%) and a negative attitude as many as 9 people (14.5%).

The results of research conducted by (Palupi & Sawitri, 2015) explains that attitude is a level of affection both positive and negative. Positive affect is a happy affection, while negative affection is an unpleasant affection.

According to (Notoatmodjo, 2010) 3 main components can form a complete attitude, namely trust, emotional life, and a tendency to act. Respondents in this study have a positive attitude because seen from the knowledge of respondents tend to have more good knowledge such as understanding, signs and symptoms, impacts, ways transmission and prevention. This knowledge makes people think and try to prevent the transmission of COVID-19. In this thinking, the components of emotions and beliefs come to think to form a positive attitude in acting.

4.3. The relationship between knowledge and public attitudes towards the application of health protocols in the effort to prevent COVID-19 in Sakawayana Village

Based on the results of this study, it is stated that knowledge will affect attitudes so that people can apply health protocols properly. Knowledge is the basis for the formation of a person's attitude. This is evidenced by the large number of respondents who have good knowledge, positive attitudes and apply health protocols well. This is also supported by research conducted by (Rachmani et al, 2020) which states that the higher the public's knowledge about COVID-19, the public will have a good attitude and the practice of preventing COVID-19 will be better.

Viewed from table 1.5 the relationship of knowledge to the application of health protocols states that respondents who have good knowledge can apply health protocols well, but respondents who have less knowledge in implementing health protocols are

less. From the results of the chi square statistical test with a 95% confidence level ($p = 0.05$) the p value is 0.000. Because the p value < 0.05 , it can be concluded that there is a relationship between knowledge and the application of health protocols in the effort to prevent COVID-19.

This is in line with research conducted by (20) which states that there is a relationship. There is a significant relationship between knowledge and COVID-19 prevention behavior in the community in the Potorono Banguntapan hamlet, Bantul D.I Yogyakarta, and in a study conducted by (Sari et al., 2020) also stated that there is a relationship between community knowledge and compliance with the use of masks. as an effort to prevent COVID-19.

Based on the relationship analysis conducted using chi square statistics with a 95% confidence level ($p < 0.05$) the results obtained p value = 0.004 which means that there is a relationship between community attitudes towards the application of health protocols in the effort to prevent COVID-19 in Sakawayana Village.

In the study (Anggraeni, 2020) stated that the prevention of COVID-19 transmission was carried out because the community had understood the dangers of COVID-19 so that the community took anticipatory actions to prevent transmission.

According to the researcher's assumption, there is a relationship between people's knowledge and attitudes towards COVID-19 prevention efforts because people have understood about COVID-19, the dangers of COVID-19 and how to prevent it so that people can implement health protocols properly.

5. CONCLUSIONS

1. The people of Sakawayana Village have good knowledge about the meaning, signs and symptoms, impacts, modes of transmission and efforts to prevent COVID-19.
2. The community in Sakawayana Village has a positive attitude towards the application of health protocols to prevent COVID-19.
3. There is a relationship between knowledge and public attitudes towards the application of health protocols in the effort to prevent COVID-19.

References

- [1] Sari DP, Sholihah'Atiqoh, N. Hubungan antara pengetahuan masyarakat dengan kepatuhan penggunaan masker sebagai upaya pencegahan penyakit covid-19 di ngroggah. Infokes. 2020;10(1):52–5.
- [2] Damanik E, Simanjuntak YT, Wiratma DY. Pencegahan coronavirus disease 19 (COVID-19) pada pedagang pasar helvetia kelurahan helvetia tengah. Jurnal Abdimas Mutiara. 2020;1(2):8–11.
- [3] WHO. Beranda satgas penanganan COVID-19. covid19.co.id; 2020 [cited 2020 November 22]. Available from: <https://covid19.co.id/>
- [4] Hafsari AR, Saepulah A, Widian A, Ulfa RA. Penggunaan bahan herbal dan pendekatan spritual untuk mencegah stress. UIN Sunan Gunung Djati Bandung; 2020. 12p.
- [5] Hanoatubun S. Dampak Covid-19 terhadap perekonomian Indonesia. Journal of Education, Psychology and Counseling. 2020;2(1):146–53.
- [6] Notoatmodjo S. Promosi kesehatan dan perilaku kesehatan. Jakarta: PT. Rineka Cipta; 2014.
- [7] Notoatmodjo S. Kesehatan masyarakat. 2nd ed. Jakarta: Rineka Cipta; 2011.
- [8] Kasarua YD, Yuliana W, Winarni S. Penyuluhan kesehatan terhadap tingkat pengetahuan (tahu) ibu tentang varicella. STIKes Katolik St Vincentius A Paulo Surabaya. 2016;8(1):39–43.
- [9] Mona N. Konsep isolasi dalam jaringan sosial untuk meminimalisasi efek CONTAGIOUS (Kasus penyebaran virus Corona di Indonesia). Jurnal Sosial Humaniora Terapan. 2020;2(2):117–25.
- [10] Yusup DK, Badriyah M, Suyandi D, Asih VS. Pengaruh bencana Covid-19, pembatasan sosial, dan sistem pemasaran online terhadap perubahan perilaku konsumen dalam membeli produk retail. UIN Sunan Gunung Djati Bandung; 2020. 10p.
- [11] Mardiyah F. Apakah yang dimasuk protokol kesehatan COVID-19? Tirto.id. [internet]. July 20, 2020. Available from: <https://www.google.com/amp/s/amp.tirto.id/apakah-yang-dimaksud-protokol-kesehatan-covid-19-f3w3>
- [12] Munthe SA, Manurung J, Sinaga LRV. Penyuluhan dan sosialisasi masker di desa sifahandro kecamatan sawo sebagai bentuk kepedulian terhadap masyarakat ditengah mewabahnya virus Covid-19. Jurnal Abdimas Mutiara. 2020;1(2):115–23.
- [13] Hanifa F, Rahmah AH, Damayana F, et al. Pembuatan cuci tangan sederhana pada masyarakat daerah zona merah sebagai langkah pencegahan penyebaran Covid-19. Jurnal Pengabdian Masyarakat. 2020;1(4):640–8.

- [14] Lomboan MV., Rumayar AA, Mandagi CKF. Gambaran persepsi masyarakat tentang pencegahan Covid-19 di kelurahan talikuran utara kecamatan kawangkoan utara. Jurnal Kesmas. 2020;9(4):111–7.
- [15] Anggraeni M. Cara penularan COVID-19 yang paling sering terjadi. Merdeka.com; [internet]. May 10, 2020. 2020. Available from: <https://www.merdeka.com/trending/7-cara-penularan-corona-covid-19-yang-paling-sering-terjadi-klm.html>
- [16] Rifa'i I, Irwansyah FS, Sholihah M, Yuliawati A. Dampak dan pencegahan wabah Covid-19: Perspektif sains dan Islam. UIN Sunan Gunung Djati Bandung; 2020. 10p.
- [17] Arikunto, S. Prosedur penelitian suatu pendekatan praktik. Jakarta: PT Rineka Cipta; 2013.
- [18] Sugiyono, S. Metode penelitian pendidikan pendekatan kualitatif dan kuantitatif. Bandung: Alfabeta; 2014.
- [19] Suprayitno E, Rahmawati S, Ragayasa A. Pratama muchti yuda. Pengetahuan dan sikap masyarakat dalam pencegahan Covid-19. Jurnal Ilmu Kesehatan. 2020;5(2):68–73.
- [20] Mujiburrahman, M., Riyadi, M. E., & Ningsih, M. U. Pengetahuan berhubungan dengan peningkatan perilaku pencegahan COVID-19 di masyarakat. Jurnal Keperawatan Terpadu. 2020;2(2):130–45.