

A Review: Fundamental Aspect of Health Protocol Obedience for Preventing COVID-19 Transmission in Indonesia

Ulisis Maradona Tarigan¹, Aris Widayati²

¹ Faculty of Pharmacy, Universitas Sanata Dharma, Yogyakarta, Indonesia

² Department of Social Behavior Administrative, Faculty of Pharmacy, Sanata Dharma University, Yogyakarta, Indonesia

Ulisis_Tarsil@yahoo.com

Abstract

Coronavirus disease 2019 (COVID-19) is a communicable disease that occurs in respiration systems from one to another human through droplets and direct contact with 4.216.728 cases confirmed on October 1, 2021. Employing the number of cases, the Indonesian Government has made some efforts to improve health protocol compliance. The rate of compliance in every individual is affected by factors such as motivation, severity perception, knowledge, the impact of change, culture, satisfaction level, and health service quality obtained. In this review, we examine the factors which play a role in patient compliance based on the number of works of literature as research material. The search was carried out by searching national and international published scientific journals in the past 2 years (2020 – 2021) with the keywords Compliance, COVID-19 Health Protocol, and Indonesian people through the Google Scholar database. The results from various references show there are fundamental factors in Health Protocol compliance such as positive barriers, knowledge, health status, and awareness level. The level of awareness affects the compliance with health protocol and may make it more easily prevent the spread of COVID-19. The awareness is also affected by the educational level in society.

Keywords

Compliance; COVID-19 Health Protocol; Indonesian People



I. Introduction

Coronavirus diseases 2019 (COVID-19) are infectious diseases that appear in the respiratory tract and are known to cause illnesses ranging from the common cold to Severe Acute Respiratory Syndrome (SARS). The Covid-19 virus can be transmitted from person to person through droplets and direct contact. Disease pathogens that have been confirmed as Novel Corona Virus by molecular method and known as 2019 Novel Corona Virus (2019-nCoV), and since January 30, 2020, by World Health Organization declared an international extraordinary event in public health [1]

In Indonesia, data from the www.covid19.go.id page as of October 1, 2021, the number of confirmed residents is 4,216,728 people, active cases are 34,867 people, 4,039,835 people have recovered and 142,026 have died [2]. Clinical manifestations that occur are usually mild and appear gradually. Some people are asymptomatic and remain healthy. Symptoms include aches and pains, nasal congestion, runny nose, headache, conjunctivitis, sore throat, diarrhea, loss of smell and taste, or skin rash. Data from several countries shows that 40% of cases have mild symptoms, 40% have moderate illnesses including pneumonia, 15% of cases have severe, and 5% of cases are in critical condition. [2].

The protocol for the management of COVID-19 in Indonesia released by the Ministry of Health consists of the management of confirmed COVID-19 patients, the management of confirmed COVID-19 patients, and the management of COVID-19 in children, adolescents, and neonates. [3] .

The prevention strategy is in accordance with the transmission that occurs both at the national and regional levels to slow and stop the rate of transmission or transmission, as well as delay the spread of transmission, providing optimal health services for patients. Especially for critical cases and minimizing the impact of the COVID-19 pandemic on the health system, social services, activities in the economy, and other sector activities. [4] .

Handling and prevention of COVID-19 are carried out by employing prevention and transmission to individuals and protection of health in the community. Prevention of transmission to individuals is carried out by regularly cleaning hands, using masks, maintaining distance, limiting contact, increasing body resistance, managing comorbidities so that they are controlled, managing mental and psychosocial health, and implementing adaptation of new habits by always maintaining the Health Protocol and all activities. . Public health protection is carried out employing prevention, case finding, and handling quickly and effectively. Efforts made by both individuals and the community are highly dependent on the compliance of every member of the community [3].

The Government of the Republic of Indonesia has made various efforts to improve Health Protocol compliance, one of which is monitoring compliance in 34 provinces and the data is displayed at <https://covid19.go.id/monitoring-kepatuhan-protokol-kesehatan>. The results of monitoring carried out in the period from 20 September to 26 September 2021 with the number of individuals being monitored were 8,255,890 at 1,157,431 monitoring points in 34 provinces and 375 regencies/cities, showing that some parts of Indonesia have a compliance rate of > 76%. [3] .

Differences in individual compliance can occur due to various factors including motivation, level of style change required, perceived severity of health problems, knowledge, the impact of change, culture and level of satisfaction, and quality of health services received. In this study, we examine the factors that play a role in adherence based on some of the literature that we use as research material.

II. Research Method

2.1 Literature Search Strategy

The literature used is taken by using a search method through a web browser. The search was conducted for National and International published scientific journals in the last 2 years, 2020-2021 with the keywords "Compliance", "Covid-19 Health Protocol", and a combination of words using the word "Indonesian Society" through the Google Scholar database.

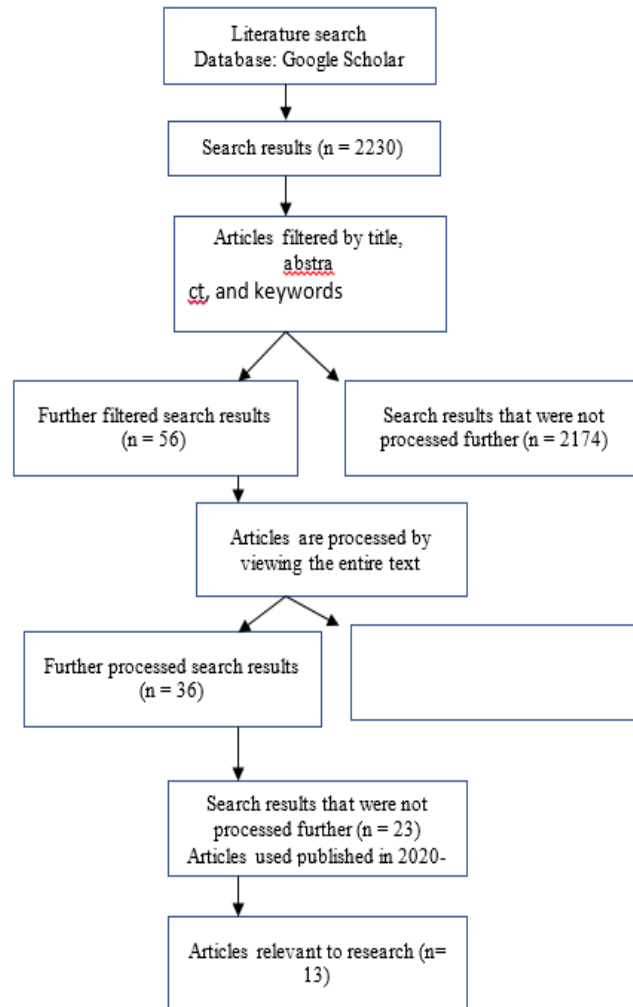
2.2 Selection of Literature-based on Certain Criteria

The selection of literature was determined based on the ability to answer questions related to the research objectives, namely knowing the underlying aspects of compliance with implementing the COVID-19 Health protocol in several Indonesian community groups. The journals used or screened are journals published starting in 2020, in English and Indonesian, with literature titles, abstracts, and keywords. The next stage is the selection and filtering by reading the entire text. The articles used in the literature review are 13 selected article titles.

2.3 Literature Search Stages

The search results from Google Scholar used obtained a total of 2230 articles. Articles are then filtered by title, abstract, and keywords used to indicate proximity to the topic discussed. The screening stage was obtained as many as 56 articles. The articles obtained were re-selected by reviewing the articles as a whole. 13 articles passed the selection stage that was relevant to the research topic. The last stage is to analyze the data and further information about the articles used, then reported employing descriptive analysis by taking the essence of each article.

The stages of the literature search process are presented in the form:



IV. Results and Discussion

The results of the literature search are then summarized in Table 1 as follows:

Table 1. Table of Literature Search Results

No	Writer	Research area	Method	Findings	Factors at play
1	Arina Rufaida et al, 2021 ^[2]	502 UMS Surakarta students	<i>Simple random sampling</i> with an online questionnaire	Student compliance with masks was 84.5%, washing hands was 72.7%, and keeping distance was 4.2%.	Gender Origin
2	Rahmafika C et al Journal of Community Mental health and Public Policy (2020) ^[4]	350 East Java people	Cross-sectional study with a health belief model approach and random sampling of data	Perceptions of vulnerability and perceived barriers affect compliance with the COVID-19 Health protocol	Vulnerability perception: Knowledge, self-awareness of vulnerability Perception of positive barriers.
3	Castri Meher STM Medical Journal (Medical Science and Technology) Vol IV No I 2021 ^[5]	82 residents of Medan	Quantitative analytical research with a survey approach	Factors that support compliance with the Health Protocol are people who have good knowledge and actions 70.7% and support attitudes and have good actions as much as 77.6%	Knowledge Attitude
4	Nurul Aini et al Journal of Health, Vol. 8 No. December 3, 2021, Pg 171-177 ^[6]	99 residents of Kemuningsari Kidul Village, Jember Regency	Observational analytic research using <i>a cross-sectional design</i>	Factors related to the attitude toward the prevention of the Health Protocol are the level of education and behavior	Level of education Behavior
5	Erika ES, Maria L Journal of Nursing, Volume 16, No. 2, October 2020, (Pages 75-82) ^[7]	384 North Sulawesi residents	<i>Cross-sectional with sample size calculator</i>	Factors related to the prevention of COVID-19 are the level of knowledge 95.8%, positive attitude 97.8%, risk of contracting 80.2%	Knowledge level Positive attitude Risk of infection
6	Riyadi, Princess Larasati National Seminar on Official Statistics 2020: Statistical Modeling on Covid-19 ^[8]	87,379 respondents	COVID-19 Impact Social Demographic Survey	The average respondent's compliance index is influenced by gender, health status, respondent reaction status, level of concern, and education level.	Gender Health Status Respondent's reaction status Level of concern Level of education
7	Dhonna A, Image AS Hospital majapahit, Vol 12 No 2 November 2020 ^[9]	153 teenagers aged 15-21 years	<i>Cross-sectional with probability sampling technique</i> using <i>simple random sampling</i> .	There is no significant relationship between the level of knowledge and compliance in implementing health protocols	
8	Beni Satria et al Journal of Public Health and	393 residents of the Datuk Lima Puluh	<i>Cross-sectional with purposive sampling technique</i>	There is a significant relationship between education and family	Education Family support

	Nutrition Vol 3 no 2 ^[10]	sub-district, Batu Bara Regency in 2021		support with adherence to health protocols	
9	Gabriela, Immanuel CHMK Nursing Scientific Journal Vol 5 No 2 April 2021 ^[11]	55 Salemba Adventist High School students	Quantitative research with an analytical descriptive design.	There is a relationship between adolescent knowledge and the pathology of using masks	Knowledge
10	Tarianna G, Dian LK, Raphael G Journal of Prima Medika Sains Vol 03 no 1 (2021) ^[12]	133 traders at Padang Bulan Morning Market, Medan City	<i>Cross-sectional study with random sampling technique</i>	There is no influence on education, knowledge, and attitudes toward compliance with the implementation of the COVID-19 Health protocol	Education Knowledge Attitude
11	I Wayan Sukawana. I Made Sukarja. Community of Publishing In Nursing (COPING) Vol 9 No.2 (2021) ^[3]	60 Community people Mawang Kelod Indigenous Village, District Ubud.	Non-experimental, with a descriptive research design, using a <i>cross-sectional approach</i> .	Community compliance in implementing the COVID-19 prevention health protocol is very low.	Knowledge
12	Ni Putu Emy Darma Yanti, et al. Journal of Mental Nursing Vol.8 No.3 (2020) ^[13]	150 people in Sumerta Kelod Village, Denpasar, Bali	quantitative with an analytical descriptive design.	public knowledge about the COVID-19 pandemic is in a good category, which is 70% and shows that it has complied with health protocols	Gender Education Age Work
13	Novi Afrianti, Cut Rahmiati Scientific Journal of Permas: Scientific Journal of STIKES Kendal Vol. 11 No.1 (2021) ^[14]	163 People	survey with a cross-sectional approach that measures variables simultaneously.	age, education, knowledge, attitude, and motivation have a significant effect on adherence to health protocols	Age Ethnic group Education Gender Work Marital status

Many studies on compliance in implementing health protocols have been carried out using various methods, ranging from surveys and questionnaires, observation, and cross-sectional by looking at several factors including age, gender, ethnicity, education, marital status, occupation concerning knowledge, and compliance with COVID-19 health protocols.

Based on the research results of Arina Rufaida, et al. 2021 from a total of 502 students in various regions in Indonesia, with various faculties, explained that students admitted that it was the most difficult to maintain a distance of 1.5-2 m from other people, it was difficult not to go out of the house like public places with a percentage of compliance in maintaining a distance only 21 people or about 4.2% of the total respondents. On the other hand, students have complied with the protocol in washing their hands and wearing masks with a percentage of compliance of 72.7% and 84.5%, respectively.

Unlike the people in East Java, based on the research of Rahmafika C, et al. 2021, from a total of 350 respondents of various community statuses and ages, it shows that perceptions of both positive and negative barriers affect compliance with health protocols during the COVID-19 pandemic. The higher the positive perception of the majority of the community, the better the level of compliance with health protocols. This is directly proportional to the research of Cashtri Meher, 2021 on 82 people in the city of Medan and the research of Erika ES and Maria L, 2021 from a total of 384 respondents in Sulawesi, that people who have positive knowledge and attitudes will be directly proportional to health protocol compliance and can reduce the risk of COVID-19 transmission, therefore the importance of continuing education to the community so that people have good knowledge and attitudes so that they comply with health protocols and can prevent the transmission of COVID-19.

The level of knowledge and attitudes can also be associated with a high level of education in a population, based on research by Nurul Aini, et al. 2020 of 99 respondents showed that the level of education influences attitudes toward preventing COVID-19. The higher the level of education, the easier it is for people to absorb and sort information obtained from electronic media (television) and social media, so that it is also easier to apply knowledge into practice/attitude in preventing COVID-19. A high level of public knowledge of health protocols can reduce the risk of COVID-19 transmission, as in the research results of Ni Putu Emy Darma Yanti, et al. 2020 that the Sumerta Kelod Village community is considered to have a low potential for COVID-19 cases based on history or behavior that has been implemented.

To transmit the habit of implementing health protocols to the community around us, it is necessary to educate each other, according to research conducted by Tarianna G, Dhian LK, Raphael G, 2021 social environmental factors affect compliance with the implementation of the COVID-19 health protocol. Creating a workplace environment that supports the implementation of health protocols is very important.

Community compliance with health protocols is also influenced by public health factors, based on research by Riyadi and Putri Larasaty, 2020 of 87,379 respondents showed that public health status affects health protocol compliance where low health status is more obedient to health protocols such as elderly and vulnerable people. against contracting COVID-19.

V. Conclusion

From the results of the review, it can be concluded that the underlying aspect of compliance with the application of health protocols in preventing the spread of COVID-19 is Knowledge, where a high level of knowledge affects compliance with health protocols and can prevent the transmission of COVID-19. The high level of knowledge can also be influenced by the educational status in the community.

References

- Afrianti N, Rahmiati Academy of Nursing Kesdam Iskandar Muda Banda Aceh C, Alam K, Kuta Alam K, Banda Aceh K. Factors Affecting Community Compliance with the Covid-19 Health Protocol. Vol. 11, Kendal STIKES Scientific Journal. 2021.
- Afro RC, Isfiya A, Rochmah TN, Administration D, Health K, Community K, et al. Analysis of Factors Affecting Compliance with Health Protocols During the Covid-19 Pandemic in East Java Community: Health Belief Model Approach Analysis of

- Factors Affecting Health Protocols Compliance During Covid-19 Pandemic In East Java Community: Health Belief Model Approach. Available from: <http://cmhp.lenterakaji.org/index.php/cmhp>
- Anggreni D, Safitri CA. The Relationship of Adolescent Knowledge About Covid-19 With Compliance In Implementing Health Protocols In The New Normal Period. Vol. 12, Majapahit Hospital. 2020.
- Ginting T, Kaban DL, Ginting R. The compliance of morning market traders in implementing the COVID-19 prevention health protocol. *Prima Medika Sains Journal* [Internet]. 2021 Sep 29;3(1). Available from: <http://jurnal.unprimdn.ac.id/index.php/JPMS/article/view/1649>
- Health J, Aini N, Dwi FM, Study Program P, Midwifery D, Midwifery A. Attitudes and Behavior of Covid-19 Prevention in Kemuningsari Kidul Village, Jember Regency. 2020;8(3):171–7. Available from: <https://doi.org/10.25047/j-kes.v8i3>
- Hutagaol GR, Wulandari IS. The Relationship between Adolescent Knowledge and Compliance with the Use of Masks in Efforts to Prevent Covid-19 at Salemba Adventist College High School. *Chmk Nursing Scientific Journal*. 2021;5(2):66–73.
- Larasty P, Statistical Analysis and Development D. Factors Affecting Community Compliance With Health Protocols In Preventing The Spread Of Covid-19 (Factors Affecting Community Compliance With Health Protocols In Preventing The Spread Of Covid-19).
- Meher C. Description of Medan City Community Behavior Regarding the Implementation of the Covid 19 Health Protocol. *Medical Journal STM (Medical Science and Technology)* [Internet]. 2021 Jan 30;4(1):46–51. Available from: <https://jurnal.fk.uisu.ac.id/index.php/stm/article/view/131>
- Rufaida Lathifa A, Kamalia F, Pradandira Putra F, Nuryanti L. Student Compliance in Doing Health Protocols during the Covid-19 Pandemic: Student Compliance in Implementing Health Protocols during the Covid-19 Pandemic.
- Satria B, Kasim F, Sitepu K, Rambey H, Simarmata M, Bangun SMB, et al. The Relationship between Respondents' Characteristics and Family Support with Compliance with the Covid-19 Prevention Health Protocol in Datuk Lima Puluh District, Batu Bara Regency. *Journal of Public Health and Nutrition (Jkg)* [Internet]. 2021 Apr 30;3(2). Available from: <https://ejournal.medistra.ac.id/index.php/JKG/article/view/688>
- Sembiring EE, Lupita M, Meo N. Knowledge and Attitudes Related to the Risk of Infecting Covid-19 in the People of North Sulawesi. Vol. 16, NERS: Journal of Nursing. 2020.
- Shewasinad Yehualashet S, Asefa KK, Mekonnen AG, Gameda BN, Shiferaw WS, Aynalem YA, et al. Predictors of adherence to COVID-19 prevention measure among communities in North Shoa Zone, Ethiopia based on health belief model: A cross-sectional study. *PLOS ONE* [Internet]. 2021 Jan 22;16(1):e0246006-. Available from: <https://doi.org/10.1371/journal.pone.0246006>
- Sukawana I, Sukarja I. Overview of Mawang Kelod Community Compliance in Implementing the Covid-19 Prevention Protocol in Public Places in September 2020. *Community of Publishing In Nursing (COPING)*, p-ISSN 2303-1298, e-ISSN 2715-1980. 2021;9(No.2):204–10.
- Yanti NPED, Nugraha IMADP, Wisnawa GA, Agustina NPD, Diantari NPA. Public Knowledge about Covid-19 and Public Behavior During the Covid-19 Pandemic. *Journal of Mental Nursing*. 2020 Sep 7;8(4):491.