The Relationship Between Knowledge and Attitudes of Patients Level Compliance with Protocol Implementation Covid-19 Health on Pandemic Period in RS Mata Undaan Surabaya

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ABSTRACT

COVID-19 is a global health problem today. Many people do not comply with health protocols consistently so that confirmed cases of covid-19 are getting higher. This is due to low knowledge and poor attitude towards efforts to prevent the spread of covid-19. The purpose of the study was to determine the relationship between knowledge and patient attitudes with the level of compliance in carrying out the covid-19 health protocol during the pandemic at the RS Mata Undaan Surabaya. The research method uses correlational descriptive with a cross sectional design. The population is patients at the RS Mata Undaan Surabaya, amounted to 280 people. Samples were taken as many as 165 people using the Probability Sampling technique with Simple Random Sampling. The independent variable is knowledge and attitude, the dependent variable is compliance. The instrument used a questionnaire, analyzed using the Spearman Rho correlation test. The results showed that most of the patients had sufficient knowledge as many as 96 people (58.2%), sufficient attitude as many as 113 people (68.5%), and a moderate level of compliance as many as 117 people (70.9%). The conclusion of this study is that there is a relationship between knowledge and attitudes of patients with the level of compliance with the Covid-19 health protocol during the pandemic at the RS Mata Undaan Surabaya with a p-value of 0.000 ($\rho < \alpha = 0.05$). The implication of the research is to minimize the spread of COVID-19 by consistently implementing the COVID-19 health protocol.

Keywords: Knowledge, Attitude, Compliance Level, Patient Compliance with Covid-19 Health Protocols.

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INTRODUCTION

At the start in 2020, COVID-19 became problem world health . Origin This virus originally came from Wuhan, China. WHO stated that epidemic the is *Public Health Emergencies of International Concern* (PHEIC) on January 30, 2020. Disease *Coronavirus* (COVID-19) is disease infectious disease caused by the new corona virus found at the end in 2019. On February 11 in 2020, the *World Health Organization* official give the name of the

new virus the *Severe Acute Respiratory Syndrome Corona Virus-2 (* SARS-CoV-2) and name the disease as *Coronavirus Disease* 2019 (COVID-19) (WHO, 2020). People who are most vulnerable to this virus are people who have direct physical contact with COVID-19 sufferers, including those caring for COVID-19 patients (Akbar, 2020). The low level of knowledge about COVID-19 will cause many people to not comply with health protocols, resulting in the spread of COVID-19 becoming uncontrolled (Hikmah, 2021). Knowledge is the most important domain in the formation of behavior. One of the factors that influences human behavior is the level of knowledge (Donsu, 2017). Having good knowledge about COVID-19 is important so as not to cause an increase in the number of cases. The important thing to know about dealing with COVID-19 is how it is transmitted , how to prevent it, treatment, and complications that can occur if someone is infected with COVID-19 (Mona, 2020). For this reason, ignorance in preventing and dealing with this pandemic outbreak has resulted in an increasing number of fatalities (Akbar, 2020).

Currently, COVID-19 is still a serious world problem with numbers still fluctuating every day. Indonesia is one of the countries affected by the COVID-19 pandemic with the number of confirmed cases (new cases) increasing fluctuatingly (Purnamasari & Raharyani, 2020). The number of COVID-19 cases continues to increase rapidly as time goes by, until it spreads to various countries and there are reports of deaths (Atmami, 2021). Globally, as of January 19 2022, there were 332,617,707 confirmed cases of COVID-19, including 5,551,314 deaths reported to WHO. (WHO, 2022). Based on data from the Ministry of Health on January 19 2022, in Indonesia there were 4,275,528 confirmed cases, and there were 144,192 deaths (Ministry of Health of the Republic of Indonesia, 2022). The number of confirmed cases in East Java on January 20 2022 was 400,554, and 26,050 deaths (East Java Response to COVID-19, 2022). The number of cases in the city of Surabaya on January 20 2022 was 67,150 confirmed cases, and 2,560 deaths (Surabaya Response to COVID-19, 2022). Based on the results of field observations at the Undaan Eye Hospital in Surabaya from 12 people, 6 of them did not implement the Covid-19 health protocol as recommended, such as eating in the middle of a crowd while waiting for an examination call, 4 people did not keep their distance while waiting for an examination call, and 2 other people remove his mask when talking to other people.

Many people do not implement the COVID - 19 health protocol consistently. Several factors influence the level of compliance, namely the level of knowledge and attitudes towards disease prevention efforts in implementing health protocols (Sari, 2020). One of the factors that determine changes in health behavior is predisposing factors, namely people's knowledge and attitudes (Saputra & Simbolon, 2020). Knowledge and behavior are two interrelated things. If someone has good knowledge, it will have a positive impact on aspects of their behavior or attitude (Fitri, 2020). The COVID-19 pandemic has impacted all levels of society. Non-compliance with health protocols makes COVID-19 cases due to contact with confirmed patients even higher because there are still many people who do not wash their hands or use hand sanitizer when outside the home during the pandemic (Pinasti, 2020). Based on the results of observations and interviews with several respondents in the field, many patients have ignored health protocols because some feel

stuffy if they wear masks for a long period of time, the large number of patients being examined at the hospital also makes the available seats full so there is a lack of maintaining distance. while waiting for a check call. This can cause the spread and increase in the number of COVID-19 sufferers.

Transmission of COVID-19 occurs from positive COVID-19 sufferers through droplets that come out when coughing and sneezing (Han & Yang, 2020). If this virus enters the human respiratory tract, it will cause damage to the pulmonary alveoli and cause respiratory failure. Someone who has other health problems such as cardiovascular disease, chronic respiratory disease, diabetes, and cancer if they experience COVID-19 inflammation can experience problems with pneumonia, acute respiratory syndrome, kidney failure, and even death (WHO, 2019). To overcome this problem, all countries are required to take effective steps to prevent the spread and increase in the number of COVID-19 sufferers, namely by implementing the COVID-19 health protocol. The COVID-19 health protocol must become a habit for all Indonesian people because compliance with the COVID-19 health protocol can break the chain of transmission and reduce the spread of COVID-19 (Pratama, 2021).

The government has implemented various health protocols to control the spread of COVID-19, but many people are still inconsistent. Therefore, public awareness is needed to always implement health protocols. As medical personnel, we must always urge the public to always implement the 5 M health protocols , namely wearing masks, washing hands, maintaining distance, staying away from crowds, and limiting mobility. Apart from that, people can adopt a clean and healthy lifestyle by regularly exercising and diligently consuming balanced nutritious food. Community compliance is still a phenomenon that must continue to be improved to improve behavior in breaking the chain of transmission of COVID - 19 (Afrianti, 2021). Based on the description above, researchers are interested in examining this problem in a study entitled "The Relationship between Patient Knowledge and Attitudes and the Level of Compliance with Implementing the Covid-19 Health Protocol during the Pandemic at the Undaan Eye Hospital, Surabaya."

METHODS

This research uses the method correlational descriptive by connecting one element or elements with other elements to create new shapes and forms that are different from the previous ones (Sugiyono, 2018) . This research uses a *cross sectional design* by emphasizing measurement or observations of the independent and dependent variables only once at a time and there is no follow-up (Nursalam, 2017) . This research was conducted at the Undaan Eye Hospital, Surabaya, which consists of several units, namely the inpatient unit, medical support unit, outpatient unit and operating room. The population in this study was patients at the Undaan Eye Hospital, Surabaya, totaling 280 respondents taken from the average number of patient visits in the last 3 months from January to March 2022. The samples used were 165 patients at the Undaan Eye Hospital, Surabaya. apply several inclusion and exclusion criteria. The sampling technique uses the *Probability Sampling method* using *Simple Random Sampling* , calculating the selected

sample using the formula from Slovin. The variables in the research are knowledge and attitude as independent variables, and compliance as the dependent variable. The instrument used was a questionnaire sheet which was used to research the relationship between patient knowledge and attitudes and the level of compliance with implementing the Covid-19 health protocol during the pandemic at the Undaan Eye Hospital in Surabaya . The collected data consists of primary data that has been collected, then the data is processed through the process of *editing* (checking the data), *coding* (marking/coding), *processing* (data processing), and *cleaning. Data analysis was carried out using univariate* and bivariate statistical tests .

RESULTS AND DISCUSSION

This research was conducted at the Undaan Eye Hospital, Surabaya , a class B private hospital located in the city of Surabaya, East Java. The Eye Hospital is located on Jalan Undaan Kulon No. 19, Peneleh Village, Genteng District, Surabaya City, East Java Province . The following are the results of this research:

Table 1. Frequency Distribution of Respondent Characteristics Based on Age in RS Undaan Eyes Surabaya on 14-25 March 2022

Age	Frequency (f)	Percentage (%)
18-31 year	46	27.6
32-45 year	61	36.7
46-60 year	58	34.8
Total	165	100.0

Table 1 show that from 165 respondent, part big old32-45 year as much 61 person (36.7%).

Table 2. Frequency Distribution of Respondent Characteristics Based on Type Sex in RS Eye Invitation Surabaya on date 14-25 March2022

Type Sex	Frequency (f)	Percentage (%)
Man	47	28.5
Woman	118	71.5
Total	165	100.0

Table 2 shows that of the 165 respondents, the majority are of the same typesex Woman as much 118 person (71.5%).

Table 3 . Distribution Frequency Characteristics Respondent Based on Level Education _ _
in RS Eye Invitation Surabaya on date14-25 March 2022

Education	Frequency (f)	Percentage (%)
elementary school	10	6.1
JUNIOR HIGH SCHOOL	63	38.2
SENIOR HIGH SCHOOL	68	41.2
College Tall	20	12.1
No School	4	2,4
Total	165	100.0

Table 3 show that from 165 respondent, part big The patient's last education was
High School (SMA).68 person (41.2%).

Table 4. Distribution Frequency Characteristics Respondent Based on Income at
Undaan Eye Hospital Surabaya on 14-25 March 2022

Income	Frequency (f)	Percentage (%)
Income still >Rp 4,375,479	15	9.1
Income still < Rp 4,375,479	37	22.4
Income No still	84	50.9
Not working/not workingincome	29	17.6
Total	165	100.0

Table 4 show that from 165 respondent, part big income No still as much 84 person
(50.9%).

Table 5. Distribution Frequency Characteristics Respondent Based on Knowledge
of Health Protocols at Undaan Eye Hospital, Surabayaon 14-25 March 2022

Category Knowledge	Frequency (f)	Percentage (%)
Not enough	26	15.8
Enough	96	58.2
Good	43	26.1
Total	165	100.0

Table 5 shows that out of 165 respondents at Undaan Eye Hospital Surabaya own
knowledge Enough as much 96 person (58.2%).

Table 6. Frequency Distribution of Respondent Characteristics Based on Attitude regarding the Health Protocol at Undaan Eye Hospital Surabaya ondate 14-25 March 2022

Category Attitude	Frequency (f)	Percentage (%)
Not enough	18	10.9
Enough	113	68.5
Good	34	20.6
Total	165	100.0

Table 6 show that from 165 respondents in RS Eye InvitationSurabaya has attitude Enough as much 113 people (68.5%).

Table 7. Distribution Frequency Characteristics Respondent Based on Compliance with Health Protocols at Undaan Eye Hospital Surabaya on date 14-25 March 2022

Category Obedience	Frequency (f)	Percentage (%)
Low	12	7.3
Currently	117	70.9
Tall	36	21.8
Total	165	100.0

Table 7 show that from 165 respondents in RS Eye InvitationSurabaya with level obedience medium as many as 117 person (70.9%).

Table 8 . Results Test Correlation Knowledge with Obedience Operate Protocol Health Covid-19 in RS Eye Surabaya Draw

Correlations

			Obedience	Knowledge
Spearman's rho	Obedience	Correlation Coefficient	1,000	,403 **
		Sig. (1-tailed)	.	,000
		N	165	165
	Knowledge	Correlation Coefficient	,403 **	1,000
		Sig. (1-tailed)	,000	.
		N	165	165

**. Correlation is significant at the 0.01 levels (1-tailed).

Based on the correlation test results in the table above, level results were obtained significant 0.000 (<0.05) for variable X1 with Y which can be interpreted There is connection Which significant between knowledge with obedience carrying out the Covid-19 health protocol at the Undaan Eye Hospital Surabaya. *Correlation* Column *Coefficient* show direction connection positive relationship between knowledge and compliance. Which

means if there is an increase in variable Y, then variable X will experience an increase and so also on the contrary.

Table 5.9 Results Test Correlation Attitude with Obedience Operate Protocol Health Covid-19 in RS Mata Undaan Surabaya

Correlations

			Obedience	Attitude
Spearman's rho	Obedience	Correlation Coefficient	1,000	,668 **
		Sig. (1-tailed)	.	,000
		N	165	165
	Attitude	Correlation Coefficient	,668 **	1,000
		Sig. (1-tailed)	,000	.
		N	165	165

**. Correlation is significant at the 0.01 levels (1-tailed).

Based on the correlation test results in the table above, level results were obtained significant 0.000 (<0.05) for variable X2 with Y which can be interpreted There is a significant relationship between attitude and compliance protocol health covid-19 in House Sick Eye Invitation Surabaya. *The Correlation Coefficient* column shows the direction of the positive relationship between attitude with obedience. Which means if there is an increase in the variable Y, then variable X will experience increase And so as on the contrary.

a.   Patient Knowledge in Implementing Covid-19 Health Protocols during the Pandemic at Undaan Eye Hospital, Surabaya

The research results showed that of the 165 patients at the Undaan Eye Hospital in Surabaya, the majority of patients had sufficient knowledge, namely 96 respondents (58.2%). Knowledge is one of the important things to pay attention to in preventing the transmission of the Covid-19 virus. A person who has good knowledge of something will have the ability to determine and make decisions about how he can deal with it (Purnamasari & Raharyani, 2020). According to Law (2020), public knowledge about preventing disease transmission will reduce the further spread of Covid-19. Based on research conducted by Moniz (2022), it is stated that the majority of people have sufficient knowledge about health protocols in preventing Covid-19 in the new normal era in Teluk Dalam Village. Other research findings that are similar to the findings of this study were expressed in research by Sari and Utami (2021) showing that public knowledge is in the sufficient category regarding health protocols in prevention. covid-19.

Factors that influence knowledge are age, education, employment and other external factors (Notoatmodjo, 2012). The results of this study showed that the dominant respondents aged 32-45 years were 61 people (36.7%). According to Budiman and Riyanto

(2013), the older one gets, the better a person's mindset and grasping power will be, so that they have good enough knowledge . The level of education will influence knowledge. Education is a background that really supports knowledge to increase discipline in good behavior in implementing the Covid-19 protocol (Irfiah, 2020). This is proven from the results of this study, namely that the majority of patients' education level is high school, namely 68 (41.2%) respondents. According to Notoatmodjo (2012), a person's knowledge that creates disease prevention efforts can be obtained from health education because it will influence health behavior. Economic factors also influence a person's knowledge. This research shows that the majority of respondents had irregular incomes, 84 people (50.9%). Economic status can influence a person's level of knowledge, lack of facilities is one of the reasons why it is difficult to increase knowledge. Families with high incomes find it easier to meet primary and secondary needs than families with low incomes. This will influence a person's acceptance of obtaining information (Budiman and Riyanto, 2013).

According to researchers' assumptions from the level of knowledge, the majority of patients have sufficiently understood and implemented the Covid-19 health protocol. However, there are some who have poor knowledge due to several influencing factors such as age, education and also the economy. Having insufficient knowledge means that patients are still not very good at understanding the health protocols that have been established such as wearing masks, washing hands, maintaining distance, avoiding crowds and limiting activities, so people need to education to increase knowledge about how to implement health protocols properly and correctly to prevent the spread of the Covid-19 virus.

b. Patient Attitudes in Carrying Out Covid-19 Health Protocols during the Pandemic at Undaan Eye Hospital, Surabaya

Based on the research results, it shows that out of 165 patients at the hospital Mata Undaan Surabaya, the majority of patients had a sufficient attitude, 113 respondents (68.5%). Attitude is readiness and willingness to act and is not the implementation of certain motives (Notoatmodjo, 2018). The patient's attitude in implementing health protocols is quite compliant and this has become a habit during the pandemic. According to Yang , et al ., (2020) important factors in controlling the pandemic are attitudes towards preventing and controlling Covid-19 and a sense of personal and social responsibility. According to researchers' assumptions, patients' attitudes towards health protocols show that the attitude of most patients is adequate in implementing the Covid-19 health protocols. This means that some patients are still not very good at implementing the health protocols that have been established. A good attitude can be an effort to prevent the transmission of Covid-19. For this reason, as health workers, our duty is to always urge the public to do so continue to implement the Covid-19 health protocol consistently in accordance with recommendations to break the chain of transmission of Covid-19.

c. Level of Patient Compliance in Carrying Out Covid-19 Health Protocols during the Pandemic at Undaan Eye Hospital, Surabaya

Based on the research results, it shows that out of 165 patients at the hospital Mata Undaan Surabaya, the majority of patients had a moderate level of compliance, 117 respondents (70.9%). Compliance is a change in behavior from behavior that does not comply with regulations to behavior that obeys regulations (Aquarini, 2020). A person's compliance in carrying out health protocols is a form of a person's compliant behavior in accordance with regulations generally referred to by the government, which aims to improve people's behavior by implementing health protocols to support maximum health and trying to break the chain of transmission of Covid-19 (Khedmat, 2020). Based on research conducted by Wahyudin (2021), it was stated that from several research journals that were reviewed, the results showed that the level of community compliance during the Covid-19 pandemic was mostly in fairly good condition and some others were in quite poor condition or less compliant. According to researchers' assumptions , the research results show that the compliance of most patients in implementing health protocols is in the medium category. This means that some patients are still not very compliant in carrying out the health protocols that have been established. Patient compliance with health protocols needs to be improved to reduce the spread of Covid-19 so that it can reduce morbidity and mortality rates due to Covid-19.

d.   The Relationship between Knowledge and the Level of Patient Compliance in Carrying Out the Covid-19 Health Protocol during the Pandemic at the Undaan Eye Hospital, Surabaya

Based on the results of the correlation test in table 5.8, the results obtained at a significance level of 0.000 (<0.05) for variables The results of this research show a positive relationship between knowledge and compliance in implementing the Covid-19 health protocol. Research conducted by Subhan, et al (2021), explains the analysis of compliance with the implementation of the Covid-19 health protocol, where a relationship was found between a person's level of knowledge and compliance in implementing the Covid-19 health protocol. This is supported by research from Afrianti (2021), which shows that the level of public knowledge about Covid-19 influences compliance with health protocols with a value of p=0.0015, which means a high level of knowledge will influence a person in determining and making decisions about something they are facing.

Another research conducted by Devi and Nabila (2020), explains that knowledge has an influence on compliance in doing something. This is supported by research by Triyanto and Kusumawardani (2020), that a low level of knowledge will influence a person's behavior and a high level of knowledge about how to prevent transmission of Covid-19 will make a person more aware and understand the importance of preventing transmission and also the spread of Covid-19. This research has a positive relationship direction, in line with research by Lumintang (2021), showing a significant relationship between knowledge and compliance with health protocols with a correlation value of 0.357 greater than alpha 0.05, with a positive correlation direction. According to the researcher's assumptions, the results of this research state a hypothesis there is a relationship between knowledge and patient compliance in carrying out the Covid-19 health protocol at the Undaan Eye Hospital in

Surabaya. The direction of the positive relationship between knowledge and compliance means that patients with good knowledge have higher compliance, conversely, the worse their knowledge, the lower their compliance. For this reason, knowledge regarding the Covid-19 health protocol needs to be improved. Increasing public knowledge regarding Covid-19 can encourage people to comply with all established health protocols.

e.   The Relationship between Attitude and the Level of Patient Compliance in Carrying Out the Covid-19 Health Protocol during the Pandemic at Undaan Eye Hospital, Surabaya

Based on the results of the correlation test in table 5.9, the results obtained at a significant level of 0.000 (<0.05) for variables The results of this research show a positive relationship between attitudes and compliance in implementing the Covid-19 health protocol. Based on research conducted by Wiranti, et al (2020) which found a significant relationship between attitudes and public compliance with Covid-19 prevention measures. This is supported by research conducted by Kartika (2022), which states that there is a relationship between attitudes and nursing students' compliance regarding the implementation of new normal era health protocols on campus II of Indonesian Pioneer University with a p-value of 0.000 and OR 9.289. According to the researchers' assumptions, the results of this study state that the hypothesis that there is a relationship between attitude and compliance with health protocols in patients at the Undaan Eye Hospital in Surabaya is accepted. The direction of the positive relationship between attitude and compliance means that the patient's health is good Good knowledge means higher compliance, conversely, the worse the attitude, the lower compliance. For this reason, public attitudes towards implementing the Covid-19 health protocol need to be improved. Increasing attitude Good implementation of the Covid-19 health protocols set by the government can encourage the public to comply in following all Covid-19 health protocols consistently.

CONCLUSION

The results of this research are the results of testing in the discussion section carried out by researchers. Based on the results of research conducted by researchers at Undaan Eye Hospital, Surabaya on March 14-25 2022, several conclusions can be drawn, including the following:

a. Most of the patients' knowledge in carrying out health protocols during the Covid-19 pandemic at Undaan Eye Hospital in Surabaya was in the sufficient category in carrying out health protocols, namely 96 (58.2%) people.

b. The attitude of patients in carrying out health protocols during the Covid-19 pandemic at the Undaan Eye Hospital in Surabaya was mostly in the adequate category in carrying out health protocols, namely 113 (68.5%) people.

c. The level of patient compliance in implementing health protocols during the Covid-19 pandemic at the Undaan Eye Hospital in Surabaya was mostly in the moderate category in implementing health protocols, namely 117 (70.9%) people.
d. Knowledge has a significant relationship with the level of compliance with implementing the Covid-19 health protocol at the Undaan Eye Hospital in Surabaya with a p-value of 0.000 ($\rho<\alpha$=0.05). The direction of the relationship is positive, meaning the relationship is in the same direction, if the patient's knowledge of health protocols is good then the level of compliance is also high.
e. Attitude has a significant relationship with the level of compliance in implementing the Covid-19 health protocol at the Undaan Eye Hospital in Surabaya with a p-value of 0.000 ($\rho < \alpha$ = 0.05). The direction of the relationship is positive, meaning that the relationship is in the same direction, if the patient's attitude is good towards health protocols then the level of compliance is also high.

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