



Level of knowledge and behaviour of society district Jombang about covid-19

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Abstract: Occurrences of the COVID-19 outbreak have appeared in 215 countries worldwide, including the country of Indonesia. Jombang is a regency with a higher increase in COVID-19 patients than its neighboring cities and regencies in the province of East Java. The number of positive COVID-19 patients in Jombang currently stands at 64 documented cases. To reduce the increase in the number of new cases, all layers of the public and government are required to take part. The purpose of this research is as knowledge about Covid 19 is very important for the community so that people can make decisions in behaving appropriately to break the chain of transmission of Covid 19. This research is quantitative with an analytical correlation design. The sample count is 144 respondents randomly chosen to fill in a Google Form that was distributed via WhatsApp to the general public of the regency of Jombang. The data was analyzed using the Spearman Analytical Correlation method. Results show that the public of Jombang regency included into the category who possess a good knowledge of COVID-19 is (90%) with only (10%) in the category with enough knowledge. The public of Jombang in dealing with the COVID-19 pandemic, such as wearing a mask, practicing hand hygiene, and physical/ social distancing, shows a percentage of (95,8%) included in the good category with only (4,2%) in enough category.

Keywords: Knowledge, behaviour, covid-19.

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INTRODUCTION

World health problems that are currently in the spotlight and are very important to get the attention of health scientists and the general public are diseases caused by the corona virus. Corona Virus Disease - 19 or more popularly known as COVID-19 has been established by WHO (World Health Organization) or The World Health Organization as a Public Health Emergency Concerning the World (KMMMD) on January 30, 2020 and finally designated as a Pandemic on March 11, 2020 (Keliat et al., 2020). A pandemic is an outbreak that occurs simultaneously everywhere, covering a wide geographical area (KBBI, 2020) while a pandemic as a Covid-19 pandemic is an event of the spread of the 2019 coronavirus disease worldwide and until April 2020 it has infected more than 210 countries (WHO, 2020). In Indonesia, the first case of Covid- 19 was confirmed on March 2, 2020, with a total of two cases (Nurani, 2020). In May 2020, the death rate continues to occur even though it is offset by the number of patient cures. Globally, there were 4,170,424 cases of covid-19 with 287,399 deaths (WHO Report, 2020). In Indonesia, the increase in the number of confirmed cases continues to increase, where in May it was



still at 10,551 cases with 800 people died (Kompas.com), but until June 16 2020 cases increased quite significantly to a total of 40,400 cases with a total death toll of 2231 death (Kemkes RI, 2020).

Covid-19 is an infectious disease caused by a new type of coronavirus discovered in 2019, hereinafter referred to as Sars-Cov 2 (severe acute respiratory syndrome coronavirus 2). This virus is very small (120-160 nm) which mainly infects animals, including among others are bats and camels. Currently, human-to-human spread has become the main source of transmission so that the spread of this virus is very aggressive. The transmission of this disease occurs from positive patients with Covid 19 through droplets that come out when coughing and sneezing (Han, 2020). However, it is also estimated that this virus spread from people who are asymptomatic but the test results show positive for Covid-19. In addition, it has been researched that this virus can live on aerosol media (produced through a nebulizer) for at least 3 hours (Susilo et al., 2020).

Efforts to break the chain of the spread of Covid-19 require good understanding and knowledge from all elements including society. Knowledge is a result of curiosity through sensory processes, especially in the eyes and ears for certain objects. Knowledge is also the most important domain in the formation of behavior (Donsu, 2017). A person's knowledge is influenced by several factors, including education level, occupation, age, environmental factors and socio-cultural factors (Notoatmodjo, 2010). Behavior is a person's response or reaction to stimuli (KBBI, 2014), while according to Robert Kwick in Donsu (2017) behavior is some of a person's actions that can be studied and observed. One of the factors that influence human or community behavior is the level of knowledge (Donsu, 2017).

In the case of the Covid-19 pandemic in Indonesia, public knowledge about Covid-19 is very much needed as a basis for society in showing Covid-19 prevention behavior. In this research, we will look for the relationship between the level of knowledge of the people of Jombang Regency about covid-19 and community behavior in efforts to prevent the transmission of covid-19.

METHOD

This research is a quantitative study with a correlation analytic design. The number of samples was 144 respondents according to the calculation of the analytical sample size of nominal ordinal correlation (Dahlan, 2018). Based on the sample size table for analytic diagnosis of Ordinal-Ordinal correlation with a correlation coefficient of 0.25, the minimum sample size is 134. So that after 144 respondents were obtained, the distribution of the questionnaire was stopped. Sampling was carried out randomly using the google form link which was distributed via WhatsApp to all the people of Jombang Regency. Sampling was carried out for 1 week.

The initial research activity carried out was to analyze the situation of the development of Covid-19 in Jombang Regency and continued with the preparation of the instrument or questionnaire. The questionnaire consists of 20 questions for the knowledge questionnaire and 16 statements for the behavior questionnaire. Knowledge variables are measured and categorized ordinal, namely the

knowledge of the people of Jombang Regency is categorized into three levels, namely High (if the respondent score is 76-100), Sufficient (56-75) and Less (if <56). As for the behavior variable, it is also divided into 3 categories, namely good, good enough and not good. Data analysis was performed using univariate and bivariate methods. Univariate analysis was performed on each variable while bivariate analysis used Spearman correlation analysis.

RESULTS AND DISCUSSION

Table 1 shows the characteristics of the respondents such as age, sex, education, and employment. Based on all the characteristics of the respondents provided information that most respondents of reproductive age (26- 45 years) and the majority of female respondents. Most respondents education is the Diploma and S1 as well as to work the respondents were employees swasta. Untuk residential areas of the respondents came from all districts of Jombang.

Table 1. Characteristics of Respondents

Variable	Category	N	Percentage (%)
Age	16-25	17	11.8
	26-35	55	38.2
	36-45	51	35.4
	46-55	19	13.2
	56-65	2	1.4
Gender	Male	51	35.4
	Female	93	64.6
Educational level	Primary School	1	0.7
	Junior High School	10	6.9
	Senior High School	42	29.2
	College student	71	49.3
	Postgraduate	20	13.9
Profession	State Civil Apparatus	22	15.3
	Indonesian State Army (TNI)/ Republic of Indonesia Police (POLRI)	4	2.8
	Housewife	27	18.75
	Entrepreneur	23	15.97
	General employees	42	29.2
	Etc	26	17.9

Table 2. Level of Public Knowledge about Covid-19

No	Category	N	Percentage (%)
1	High	130	90.3
2	Medium	14	9.7
3	Low	0	0

Table 3. Community Behaviour Regarding Covid-19

No	Category	N	Percentage (%)
1	Good	138	95.8
2	Enough	6	4.2
3	Poor	0	0

Table 4. The Relationship between Knowledge Level and Community Behaviour in Jombang Regency about Covid-19

Knowledge	Good		Fair		Total		
	n	%	n	%	N	%	
High	126	96.9	4	3.1	130	90.3	0.047
Enough	12	85.7	2	14.3	14	9.7	
Total	138	95.8	6	4.2	144	100	

Significant relationship with p-value <0.05

The results showed that the knowledge of the people of Jombang Regency about Covid 19 was in the Good category (90%) and only 10% was in the sufficient category. For the behavior of the people of Jombang Regency related to Covid 19 shows good behavior, as many as 95.8% and only 4.2% of the people behave quite well.

There is a significant relationship between knowledge and people's behavior about Covid 19 with a p-value of 0.047 (<0.05) as shown in table-4. The good behavior referred to is the behavior of preventing Covid-19, including washing hands with soap and hand sanitizer, keep your distance, carry out appeals to stay at home, avoid crowds and physical and social distancing.

Knowledge of Covid 19 in the people of Jombang Regency shows high knowledge. The results of this study are in line with the results of research conducted by [Yanti et al. \(2020\)](#) which states that 99% of Indonesians have good knowledge, 59% have a positive attitude and 93 % have good behavior towards efforts to prevent Covid-19 in Indonesia with social distancing. People who have good knowledge also have good attitudes and behavior. In addition, this high level of knowledge is also supported by the education level of most of the respondents who are higher education (diploma and bachelor's degree). A high level of education for someone who is high will be easier to get access information about a problem ([Yanti et al, 2020](#)).

One of the internal factors that affect a person's level of knowledge is the level of education, the higher a person's education level, the higher the knowledge ([Putri, 2017](#)). Other research that is in line with the results of this study is research conducted by [Clements \(2020\)](#) which shows that the people of the United States have good knowledge and behavior and [Zhonng et al. \(2020\)](#) who examines Chinese society as the initial place for the discovery of this corona virus also knowledge and good and positive behavior. This is also related to the experience of the Chinese people in dealing with the SARS outbreak in the 2000s.

Public knowledge about Covid-19 is a very important aspect in a pandemic like today, which

includes the causes of covid and its virus characteristics, signs and symptoms, terms related to Covid, necessary examinations and the transmission process and efforts to prevent the disease. The regency of Jombang, which is high on Covid 19, has an effect on the incidence and prevention of Covid-19. Good knowledge can be supported by the acceptance of information circulating in the community about Covid 19 (Tri, 2020). Someone who already knows about certain information, then he will be able to determine and make decisions how he should deal with it. In other words, when someone has information about Covid-19, he will be able to determine how he should behave towards Covid-19 (Ahmadi, 2013).

Based on the survey results, public knowledge that still needs to be improved, among others, is about early detection checks with RDT (Rapid Diagnostic Test) which is still considered a test that determines Covid-19 and some respondents who consider the reason for using masks is because the corona virus can fly freely in the air. Education is needed to improve people's perceptions which are still inaccurate. According to Olum, et al. (2020) continuous professional education is needed to increase knowledge and change negative attitudes and improve prevention and treatment practices. Good behavior can be an effort to prevent the transmission of covid19 (Lestari, 2019). Health behavior is influenced by many factors, including knowledge, perception, emotion, motivation, and the environment (Rahayu, 2014). Exploration of public health behavior can be seen from various components, including perceptions of disease vulnerability, perceptions of obstacles in prevention efforts, perceptions of benefits, encouragement, and individual perceptions of their ability to make preventive efforts.

In this study, it shows that as many as 95.8% of the people of Jombang have good behavior. The forms of behavior shown include obedience to using masks when outside the home, washing hands with soap or hand sanitizer frequently, avoiding crowds and maintaining social or social care. physical distancing. Washing hands is an effective way to kill germs, it is known that the Covid-19 virus can stick to body parts, especially hands that touch objects that have been infected by droplets. The Ministry of Health said that 75% of the transmission of the covid virus is through saliva splashing on objects (Kemenkes, 2020). In this study, it was found that some respondents had already washed their hands after touching objects, but only some had washed their hands according to the WHO protocol.

Other studies show only 50.46% adherence to hand washing with soap (Dahlan, 2020). One of the factors that affect the level of hand washing compliance is the factor of age, an increase in age, decreased adherence to hand washing (Taadi & Setoyorini, 2019). Besides that, the use of masks, where masks are also personal protective equipment that can prevent disease transmission through saliva splashing. As many as 72.2% of respondents in this study had complied with the use of masks. This is also in line with research conducted by Sari (2020) where the level of public knowledge affects compliance with using masks as an effort to prevent the spread of the corona virus. Masks that have good effectiveness against prevention are surgical masks, because they have a protection level of 56% of nanometer-sized particles, but people can still use cloth masks as an effort to prevent Covid-19

transmission through droplets (Ika, 2020). Compliance is a positive behavior from society. On the other hand, bad community behavior will increase the number of cases and death rates due to covid-19 transmission (Dahlan, 2020).

According to the Knowledge-Attitude-Behavior Model theory, knowledge is an essential factor that can influence behavior change, and individuals can acquire knowledge and skills through the learning process (Liu et al, 2016). Thus public knowledge that still needs to be straightened out and community behavior that is still negative can be pursued by learning activities through education by the authorities. In the community, village health forums or the like can take a role in the effort to implement the said activities.

CONCLUSION

Based on these results, showing that the public's knowledge about Covid Jombang 19 at the high category and the behavior of people on prevention and transmission Covid-19 in both categories. This condition is a potential and strength for Jombang district government in handling Covid-19 program.

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