

Relationship between Knowledge and Attitudes with Health Behavior in the Prevention of COVID-19 at Senior High School, Medan City in 2020

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ABSTRACT

Health behavior plays an important role in increasing one's awareness in maintaining one's health. Especially to prevent oneself in order to avoid diseases, both infectious and non-communicable diseases. Recently the world is being faced with the problem of the corona virus which has become a widespread pandemic in several countries. Coronavirus disease (COVID-19) is a type of disease that occurs due to infection with the SARS-CoV-2 type virus. This virus can be transmitted from animals to humans and humans to humans. Clinical manifestations can appear within one or two to fourteen days after exposure to the virus, but they can spread to other people even if no symptoms appear. This study aims to determine the relationship between knowledge and attitudes with health behavior in the prevention of COVID-19 in Senior High School, Medan City in 2020. This type of research is quantitative analytic with a cross sectional design. The number of population in this study was 1,119 with a total sample of 221 obtained using a random sampling system. The instrument in this study using a questionnaire used in the form of google form. The data obtained in this study were analyzed by bivariate and using chi-square. The results showed a p-value of $0.513 > \alpha = 0.05$, which means that there is no relationship between knowledge and health behavior in the prevention of COVID-19 at Senior High School, Medan City in 2020. For the attitude variable, the p-value is $0.076 > \alpha = 0.05$, which means that there is no relationship between attitude and health behavior in the prevention of COVID-19 at Senior High School, Medan City in 2020.

Keywords: Knowledge, Attitudes, Prevention, COVID-19

INTRODUCTION

Health behavior or commonly called health behavior is an action or activity carried out by humans which is usually associated with strategies to prevent disease and the level of health can be maintained. This is the main pillar for preventing both communicable and non-communicable diseases. Healthy behavior is the total activity that a person performs, whether observable or unobservable, it is related to preventive behavior.

Healthy behavior plays an important role in increasing one's awareness in maintaining one's health. Especially to prevent oneself in order to avoid diseases, both infectious and non-communicable diseases. Therefore, health behavior is needed to eradicate infectious diseases such as epidemics or disease outbreaks.

Things that can influence a person's behavior can arise from outside of us or within ourselves. According to Green (1980) in Notoatmodjo (2007), states that factors that can influence action or behavior in humans include predisposing factors, reinforcing factors and enabling factors. shape one's behavior so that they want to behave in a healthy manner (Notoatmodjo, 2007).

Recently the world is being faced with the problem of the corona virus which has become a widespread pandemic in several countries. The virus has killed many

victims and is of special concern to the world. This virus can attack anyone regardless of age group. Coronavirus disease (COVID-19) is a type of disease that occurs due to infection with the SARS-CoV-2 type virus. This disease usually attacks humans and first appeared in the city of Wuhan, Hubei Province, China. This virus can be transmitted from animals to humans and humans to humans. Clinical manifestations can appear within one or two to fourteen days after exposure to the virus, but they can spread to other people even if no symptoms appear.

On Thursday, March 12, 2020, the World Health Organization (WHO) said that if the corona virus has spread to all countries and even continents, then WHO has designated it as an epidemic (pandemic). WHO hopes that countries affected by COVID-19 will seek prevention by diligently washing hands using soap and running water or using hand sanitizers, using masks, keeping distance or avoiding crowds (World Health Organization, 2020). The number of COVID-19 cases in Indonesia continues to increase, many have recovered but some have lost their lives. Strategies to deal with and prevent are always being improved to fight with the corona virus. This problem started at the Wuhan Huanan animal market, where sellers sell animal meat such as snakes, bats and various types of rats.

According to WHO, this corona virus spreads through the droplets of sufferers when coughing, sneezing, or speaking at a short distance of less than one meter with patients infected with the corona virus. According to WHO, the droplets are too heavy to be able to stay in the air so they will fall directly on the floor or something surface. Transmission can also occur when before washing hands, touching objects contaminated with the corona virus and accidentally holding the eyes, nose and mouth (World Health Organization, 2020).

The World Health Organization (WHO) said the number of positive patients infected with the corona virus around the

world until April 18 2020 had reached 2.24 million people. The United States is the country with the largest number of infected patients in the world, which is close to 700 thousand people. This is summarized from data from John Hopkins University. The COVID-19 pandemic has affected at least 185 countries and killed 153,882 people. The highest number of COVID-19 sufferers was in the United States, with a positive number of 699,706 and 34,575 who died worldwide. After that there was Spain with 190,839 infected patients. After that followed by Italy as many as 172,434 people. Furthermore, France as many as 149,130 people, and Germany as many as 141,397 people (World Health Organization, 2020).

Meanwhile, according to data from the Ministry of Health in Indonesia, referring to the Task Force for the Acceleration of Handling COVID-19, that until April 17, 2020, it reached 5,923 positive. The number of patients who recovered was 607 people, there were 520 people who died and 4,796 people were being treated. It is known that the number of people under surveillance (ODP) in Indonesia is 173,732 and 12,610 patients are under surveillance (PDP) (Kementrian Kesehatan, 2020).

Until now, DKI Jakarta is the province with the most cases of COVID-19, reaching 2,815 people, 246 patients who recovered and 204 patients who died. Furthermore, West Java with 632 confirmed patients, 56 patients who died and 41 patients who recovered. And then East Java with 522 confirmed patients, 46 patients who died and 94 people who recovered. The addition of COVID-19 cases every day is always increasing, this shows that there is still a lot of transmission (Kementrian Kesehatan, 2020).

WHO said that COVID-19 was an international disaster. Therefore, WHO announced to keep a distance from people with ARDs. Always wash your hands after meeting and close to sufferers or public areas. People showing symptoms of an

acute respiratory infection must follow coughing/sneezing etiquette, wear a medical mask and seek medical care if they have difficulty breathing (World Health Organization, 2020).

The government and the Ministry of Health of the Republic of Indonesia invite the people to work together to promote a healthy lifestyle, be diligent in exercising so that the body's immunity can increase. Wash your hands frequently using running water and soap for 20 seconds to clean them up. Cover your nose and mouth when coughing and sneezing using a tissue then throw it away and wash hands thoroughly after sneezing. Stay away from all forms of crowds, gatherings and various gatherings, avoid touching eyes, nose and mouth. Wear masks when in open spaces. Avoid traveling outside when you feel sick, if you experience symptoms of high fever, cough and shortness of breath, contact the hospital and ask for help. Next, always see and follow corona virus information from official and actual websites in order to get real results (Kementrian Kesehatan, 2020).

North Sumatra has been included in the category of the center of the spread of COVID-19 because in some cases it is known to have occurred due to local transmission. The number of positive COVID-19 patients in North Sumatra on June 1, 2020 totaled 417 people with the most number one area in Medan City with 266 positive COVID-19 patients, number two Deli Serdang Regency with 56 positive COVID-19 patients, and number three There are 26 COVID-19 positive patients in the Pematang Siantar region (Gugus Tugas COVID-19 Sumatera Utara, 2020). There are two cases of people without symptoms (OTG) COVID-19 in Aceh in patients aged 13 years from Bener Meriah and 38 years from Banda Aceh (Gugus Tugas COVID-19 Aceh, 2020).

Most positive patients with COVID-19 were in Medan City, the latest data was on June 1, 2020, namely 266 people. Meanwhile, 24 patients died and 86 people recovered. Meanwhile, the number of PDPs

increased to 743 people. In addition, the ODP numbered 1195 people (Gugus Tugas COVID-19 Medan, 2020). Medan city which consists of 21 sub-districts, there are 20 sub-districts that are declared as red zones of the spread of COVID-19 while Medan Belawan District has the status of yellow zones. Meanwhile, the number of OTGs that are being monitored by the Medan City COVID-19 Task Force team is 542 people, and 64 for travellers (PP) who are being monitored (Gugus Tugas COVID-19 Medan, 2020).

In the efforts of WHO to prevent COVID-19 to break the chain of distribution, it is necessary to carry out physical distancing to countries affected by the corona virus in order to closely monitor all areas locking entrances and exits from one area (lockdown). So that people cannot leave their homes and hold associations, means of transportation both by land and sea, office work, studying in schools, and places of worship will be eliminated.

In implementing the lockdown policy, youth are a difficult target to follow, making it difficult for teenagers to become the chain of spreading COVID-19. This happened in Milan, Italy where a group of teenagers celebrated the freedom of lockdown after two months of the pandemic lockdown, Milan residents returned to living normal lives, such as gathering in cafes or sunbathing activities so that the Italian capital, Milan is considered a time bomb at risk of the COVID-19 virus. erupted again because it had not carried out lockdown activities (The Straits Times, 2020).

Indonesia for the spread of the corona virus is currently increasing drastically and extending across various regions and even various countries with the total number of positive patients surging and causing death. This has had a negative impact in the fields of politics, economy, social, culture, defense and security, and can threaten people's lives, therefore a regulatory standard is needed to deal with the spread of the corona virus in large-scale social distancing activities (PSBB). These

activities are restrictions on the activities of residents in an area suspected of being infected with the corona virus as well as restrictions on a person or object in one province, district/city. This is usually applied during holidays, spiritual events, and events that take place in the open.

The quarantine effort carried out by the government has provided a policy to eliminate PSBB activities that are considered to stop the spread of the corona virus, based on considerations of epidemiology, increasing threats, lack of community effectiveness, human resources, operational, economic, social, acculturation and environmental safety guidelines. The regulation is regulated in PP RI No. 21 of 2020 regarding PSBB in order to accelerate the handling of COVID-19.

According to the Task Force Team to accelerate the handling of COVID-19, 2020, based on data from the age group that recorded the most positive cases of COVID-19, namely 31-45 years with a percentage of 29.4%. Meanwhile, the age range of 46-59 years old is in second place with the largest number of positive cases of 27.3%. Then in the 18-30 year age group the number of positive cases was 20.6%, 15% with an age range of more than 60 years and 5.6% at the age of 6-17 years.

From the positive data for the corona virus according to the age above, it can be seen that most patients are at the age of 31-45 years. Although in the data above adolescents aged 6-17 years, only 5.6% of cases, adolescents can easily spread COVID-19 because some teenagers do not show any symptoms or have very mild symptoms so that transmission is not realized. The Task Force for the Acceleration of Handling COVID-19 again reminded the public to be careful in social activities during the COVID-19 pandemic. The reason is that currently a number of COVID-19 positive patients have people without symptoms (OTG) corona. Generally, people without symptoms come from a young age group or a healthy group

with good immunity and do not have congenital diseases.

Human behavior is a very important role in eradicating the chain of spread of COVID-19. It is not only the role of the government and health workers, but individual awareness to behave in improving their health is also an important role in eradicating the COVID-19 case. Health behavior is still difficult to change because it has become a habit and is considered small by humans, especially adolescents. Such as adolescent behavior data that has been carried out in the preliminary survey of SMA Kota Medan.

Based on the results of research at Senior High School (SMA) as many as thirty online questionnaires stated that thirty students (100%) still do activities outside the home and gather with friends. Twenty-five students (83.3%) students still do activities outside the home without wearing masks, twenty-seven (90%) still cough in public places, and as many as twenty-six students (86.6%) after traveling outside houses still often forget to wash their hands using running water and disinfection fluids, students still do not clean themselves after doing activities outside the home and touching their faces without washing their hands first.

This study aims to determine the relationship between knowledge and attitudes with health behavior in the prevention of COVID-19 in Senior High School, Medan City in 2020.

RESEARCH METHODS

In the elaboration of data processing in this study using this type of research, namely quantitative research with analytical use of the cross sectional approach, so that the approach used means that the researcher makes observations and measurements of the independent and dependent variables at the same time (Nursalam, 2011).

This research was conducted in the Medan City, because the Medan City is the number one area with the highest cases of COVID-19 with 151 positive cases of

COVID-19 and continues to increase every day based on data from the COVID-19 Task Force in May 2020. The locations in this study are 21 SMA Negeri Kota Medan Tahun in 2020 is taken 20% so that it becomes 4 SMA Negeri Kota Medan which represents the entire population of SMA Negeri Kota Medan.

When the research was carried out in May 2020 until it was finished.

The number of population in this study was 1,119 with a total sample of 221 obtained using a random sampling system.

The instrument in this study using a questionnaire used in the form of google form.

The data obtained in this study were analyzed by bivariate and using chi-square

RESULT

Bivariate Analysis

Relationship between Knowledge and Health Behavior in the Prevention of COVID-19

Following are the results of the bivariate analysis using the chi-square test

regarding the relationship between knowledge of health behaviors for prevention of COVID-19 in grade 2 high school students in Medan City. Based on Table 1, it shows that out of 3 students with low COVID-19 preventive health behaviors, there are 2 students (0.9%) with moderate knowledge and 1 student (0.5%) with high knowledge. Then, of the 36 students with moderate COVID-19 preventive health behaviors, 12 students (5.4%) with moderate knowledge and 24 students (10.9%) with high knowledge. Furthermore, out of 182 students with good COVID-19 preventive health behavior, 66 students (29.9%) with moderate knowledge and 116 students (52.5%) with high knowledge.

From the results of the bivariate analysis using the chi-square test so that the p-value is $0.513 > \alpha = 0.05$, which means that H_a is rejected and H_o is said to be accepted. So that it can be simplified that there is no relationship between knowledge in health behavior in the prevention of COVID-19 in grade 2 high school students in Medan.

Table 1. Relationship between Knowledge and Health Behavior in the Prevention of COVID-19 at Senior High School, Medan City in 2020

Knowledge	Health Behavior in the Prevention of COVID-19						Total		p-value
	Low		Medium		Good		n	%	
	n	%	n	%	n	%			
Low	0	0.0	0	0.0	0	0.0	0	0.0	0.513
Medium	2	0.9	12	5.4	66	29.9	80	36.2	
High	1	0.5	24	10.9	116	52.5	141	63.8	
Total	3	1.4	36	16.3	182	82.4	221	100	

Relationship between Attitudes and Health Behavior in the Prevention of COVID-19

Below are the results of the bivariate analysis using the chi-square test regarding the relationship between attitudes regarding the health behavior of COVID-19 prevention in grade 2 high school students in Medan. Based on Table 2, it shows that of the 3 students with low health behavior

for prevention of COVID-19, all three (1.4%) had good attitudes. Then, of the 36 students with moderate COVID-19 preventive health behaviors, 1 student (0.5%) had a bad attitude and 35 students (15.8%) had a good attitude. Furthermore, of 182 students with good health behavior for prevention of COVID-19, all (82.4%) had good attitudes.

Table 2. Relationship between Attitudes and Health Behavior in the Prevention of COVID-19 at Senior High School, Medan City in 2020

Attitudes	Health Behavior in the Prevention of COVID-19						Total		p-value
	Low		Medium		Good		n	%	
	n	%	n	%	n	%			
Bad	0	0.0	1	0.5	0	0.0	1	0.5	0.076
Good	3	1.4	35	15.8	182	82.4	220	99.5	
Total	3	1.4	36	16.3	182	82.4	221	100	

From the results of the analysis of the bivariate using the chi-square test so that the p-value is $0.076 > \alpha = 0.05$, which means that H_a is rejected and H_o is accepted. So that it can be simplified that there is no relationship between attitudes in health behavior in the prevention of COVID-19 in grade 2 high school students in Medan.

CONCLUSION AND SUGGESTION

The results showed a p-value of $0.513 > \alpha = 0.05$, which means that there is no relationship between knowledge and health behavior in the prevention of COVID-19 at Senior High School, Medan City in 2020. For the attitude variable, the p-value is $0.076 > \alpha = 0.05$, which means that there is no relationship between attitude and health behavior in the prevention of COVID-19 at Senior High School, Medan City in 2020.

Suggestions from the results of research conducted on the relationship of knowledge and attitudes with health behavior in the prevention of COVID-19 at Senior High School, Medan City in students, to teachers to provide more information by using interesting media about COVID-19 so that students can increase knowledge about COVID-19 even better. Parents should supervise their children to always be at home and ensure that children carry out health behaviors in preventing COVID-19 and complete facilities and infrastructure so that children can easily carry out health behaviors in preventing COVID-19 students should obey the rules to stay at home and carry out health behaviors in preventing COVID-19.

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