Relationship between Knowledge and Compliance with the Implementation of Health Protocols in the Area of Educational Institutions in SMA/SMK in the District of Noemuti

Yusfina Modesta Rua*, Veronika Nitsae*, Paskalis Malafu Usfinit*
*School of Nursing, Faculty of Agriculture, Universitas Timor
email: yusfinamodesta85@gmai.com

ABSTRACT

The implementation of the new normal is of course with the implementation of strict health protocols, including in the area of educational institutions. The purpose of this study was to determine the relationship between knowledge and compliance in the implementation of health protocols, especially in the education area. This study is an observational analytic study with a cross-sectional design. The sample in this study amounted to 283 respondents consisting of teachers, staff, and students. The results of the chi-square test with a level of significance = 0.05 obtained p-value (α) = 0.026 < from value = 0.05 so that it shows that there is a relationship between knowledge and the level of compliance of students and teachers in implementing the Covid 19 health protocol Students and teachers SMA in Noemuti Sub-district have a good perception of behavior and attitudes in carrying out the implementation of the Covid 19 health protocol. Compliance with the Covid 19 health protocol is carried out well because they know the benefits and risks obtained and are supported by adequate knowledge.

Keywords : COVID-19, Compliance, knowledge

INTRODUCTION

Coronavirus Disease 2019 (Covid-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). SARS-CoV-2 is a new type of coronavirus. Two types of this virus can cause severe symptoms, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Common signs and symptoms of Covid-19 infection include acute respiratory distress such as fever, cough, and shortness of breath. The average incubation period for this disease is 5-6 days with the longest incubation period being 14 days. Severe cases of Covid-19 can cause pneumonia, acute respiratory syndrome, kidney failure, and even death.[1]

The increasing number of cases spread rapidly in various parts of the world in a short time. On August 16, 2020, the World Health Organization (WHO) reported that the total accumulation of confirmed Covid-19 cases was 21.2 billion cases, including 761,000 deaths (WHO, 2020). Indonesia's accumulation since the beginning was discovered on March 2, 2020, until August 16, 2020, reported by the Ministry of Health (Kemenkes) as many as 139,549 cases with 6,150 deaths in various provinces.[1]

The spread has almost reached all provinces in Indonesia with the number of cases continuing to increase and disturbing in all aspects such as economic, political, social,

cultural, defense and security, as well as community welfare. Seeing this situation, the government has set various rules and policies to overcome and prevent the spread of Covid-19. Efforts are being made to carry out health quarantines in all areas that have felt the impact of this disease.[2]

Indonesia has implemented large-scale social restrictions (PSBB). Minister of Health Regulation Number 9 of 2020 stipulates PSBB as an effort to accelerate the handling of Covid-19. PSBB includes holidays from schools and workplaces, restrictions on religious activities, restrictions on activities in public places or facilities, restrictions on social and cultural activities, restrictions on transportation modes, and restrictions on other activities.[2] Individually, the public is also advised to practice social distancing. Social distancing is maintaining a safe distance between yourself and other people who are not at home.[3]

Government policies and regulations do not necessarily have a positive impact. The demands of the community's needs are also things that need to be considered, especially education. Therefore, after the PSBB was implemented with the ongoing Covid-19 pandemic conditions, it is necessary to carry out mitigation and readiness as optimally as possible so that they can adapt through changes in healthy lifestyles in the Covid-19 (New Normal) situation. Implementation of the new normal of course with strict health protocols. Determination of the implementation of health protocols is required in various agencies including educational institutions that have started learning face-to-face or offline and applies to green zone areas with parental/guardian approval. The implementation of health protocols, especially in the education/school area, is expected to minimize the risks and impacts of the Covid-19 pandemic.[4]

Health protocols for handling Covid-19 in the area of educational institutions such as providing handwashing facilities, instructing school residents to behave in a clean and healthy life (PHBS), cleaning the room and school environment regularly (at least 1 time a day) with disinfectants, delaying activities that involve a lot of activities. people conduct initial screening on all guests who come to educational institutions, and so on. Calls for health protocols can of course be disseminated through education as an effort to increase knowledge (cognitive), attitudes (understanding and motivation), or practice (access to information and use information) to maintain health.[5] The results of a preliminary study on teachers, employees, and students in educational institutions showed that 65% knew about various protocols for handling Covid-19 specifically in the area of educational institutions. Knowledge related to health protocols is only related to washing hands, using masks, and screening body temperature.

The results showed that one's knowledge can affect compliance.[6] Based on the results of observations, it describes the health protocols carried out in educational institutions such as washing hands, using masks, and measuring body temperature. The protocol is only carried out on students and not on teachers or guests and is carried out only at the beginning before learning begins. These results indicate that most are not compliant with implementing special health protocols in the education area. Most of them also do not know about the benefits and provisions in the implementation of each health protocol, so it is necessary for researchers to know how to know and comply with the implementation of health protocols, especially in the education area. The purpose of this study was to determine the relationship between knowledge and compliance in the implementation of health protocols, especially in the education area.

METHOD

This research conducted at SMK Negeri Noemuti, SMA Negeri Noemuti, SMK Negeri Nibaaf, and SMA Catholic St. Gabriel Noemuti, Noemuti District, Kab. TTU. This research will be conducted in 6 months. This study is an observational analytic study with a cross-sectional design. Cross-sectional research is research conducted by observing

the research respondents. Research respondents will be observed once and will be measured.[7]

The population in this study were teachers, staff, and students in SMA/SMK throughout Noemuti District. The sample is part of the population selected with certain criteria so that it represents the population.[8] In this study, the samples that will be used are teachers, staff, and students who meet the following inclusion criteria: Educators, teaching staff, and students in SMA/SMK in Noemuti District; Willing to be a respondent. The exclusion criteria are as follows: Respondents who were not present during the research process. So, in this study, the number of samples that will be used is 283 respondents. The sampling technique used in this research is stratified random sampling. Stratified random sampling is a sampling technique by dividing the population into several strata so that each stratum becomes homogeneous.[8] In this study, respondents will be divided into 4 groups, namely SMK Negeri Noemuti, SMA Negeri Noemuti, SMK Negeri Nibaaf, and SMA Catholic St. Gabriel Noemuti. There are two variables in this study, namely the independent variable and the dependent variable. The independent variable in this study was knowledge and the dependent variable in this study was adherence to health protocols.

The knowledge questionnaire has 18 statement items which include knowledge of 4 items of handwashing, 4 items of masks, 2 items of distance, 1 item of staying away from crowds, 3 items of Clean and Healthy Life Behavior (PHBS), 4 items of signs and symptoms of illness. The data scale used is the Guttman scale where the question has two answers, namely true and false. The correct answer is given a score of 1 and the incorrect one is given a score of 0. The total score is 19. The statement of knowledge about the covid 19 protocol consists of two types of statements, namely favorable (positive) statements with 14 items and unfavorable (negative) 5 items.

The compliance questionnaire has 20 statement items which include 3 items of handwashing compliance, 5 items of masks, 3 items of keeping distance, 1 item of staying away from crowds, 5 items of Healthy and Clean Living Behavior (PHBS), 3 items of signs and symptoms. The data scale used is the Likert scale, where the question has five answers, namely never, rarely, often, and always. Incorrect answers were given a score of 1, rarely were given a score of 2, often were given a score of 3, and always were given a score of 4. The total score was 80. The statement of compliance with the covid 19 protocol consisted of two types of statements, namely favorable (positive) 12 items and unfavorable (negative) 8 statements.

Instrument validity is a test to find out how far the instrument can measure the object that can be measured. The validity test in this study uses content validity. To determine the validity of the instrument, the researcher used the product-moment correlation value. Reliability is the consistency or stability of the score of a research instrument on the same individual and given at different times. In this study, to determine the reliability of knowledge and compliance instruments, it is done by the split-thing method, or by knowing the value of the reliability coefficient.

Data analysis that will be used is univariate data analysis and bivariate data analysis. Univariate data analysis was used to analyze the respondent's characteristic data. Data analysis used categorical data (nominal and ordinal data scales). Categorical data analysis will be presented in the form of frequency and percentage. Bivariate analysis was carried out to know the relationship between knowledge and adherence to health protocols. The data to be used is categorical data. The statistical test that will be used is Wilcoxon.

RESULT AND DISCUSSION

Characteristics of respondents based on age, adolescents amounted to 251 respondents (88.7%), while adult respondents were 32 respondents (11.2%); female respondents were 168 respondents (59.4%)

while male respondents were less than 115 respondents (40.6%). While respondents who are not married are 260 respondents (91.9%) while those who are married are 23 respondents (8.1%); respondents who are still students as many as 251 respondents (88.7%) while those who are married are 32 respondents (11.3%); Respondents who were still in class 10 were 94 respondents (33.2%) and class 11 respondents were 32 respondents (19.1%) while respondents in class 12 were 103 respondents (36.4%) (see table 1).

Table 1. Respondent Characteristics

Characteristics	Frequency	Percentage (%)
Age		
Youth	251	88.7 %
Adult	32	11.2 %
Gender		
Female	168	59.4 %
Male	115	40.6 %
Marital Status		
Not Married	260	91.9 %
Married	23	8.1 %
Employment Status		
Teacher	32	11.3%
Students	251	88.7 %
Grade Level		
Class10	94	33.2 %
Class 11	54	19.1 %
Class 12	103	36.4 %
Teacher	32	11.3 %

Table 2. The Relationship Between Knowledge and Compliance of Students and Teachers

Knowledge	Compliance		Total	P-value
	Compliance	Non-Compliance		
Good	206 (96,7%)	7 (3,3%)	213 (100,0%)	
Fair	57 (89,1%)	7 (10,9%)	64 (100,0%)	0,026
Poor	5 (83,3%)	1 (16,7%)	6 (100,0%)	
Total	268 (94,7%)	15 (5,3%)	283 (100,0%)	

SD means < 0.05

Based on table 2. cross-tabulation of the relationship between knowledge and compliance of students and teachers shows that students and teachers with a good level of knowledge have a higher percentage of compliance in implementing the Coronavirus health protocol 19 (Covid 19) (96,7%) than students and teachers with fair level of knowledge (89,1%) and poor (83,3%). The results of the chi-square test with a significance level = 0.05 were obtained with p-value (α) = 0.026 < from value = 0.05, it can be concluded that there is a relationship between knowledge and the level of compliance of students and teachers in implementing the Covid 19 health protocol.

The results of the study found that students and teachers with good knowledge category were 213 respondents (75,3%). Students and teachers with sufficient knowledge were 64 respondents (22,6%) while students and teachers with less knowledge were 6 respondents (2,1%).

Knowledge of cognition is an important domain for the formation of one's actions.[9] Knowledge is also the result of a person's curiosity to learn to know through a sensory process, namely the eyes and ears of certain

objects[10]. Knowledge of an object contains two aspects, namely positive aspects, and negative aspects, these two aspects greatly affect a person's attitude. The more positive aspects produced, the better a person's attitude will be. Knowledge can also be interpreted with a qualitative scale, namely good knowledge with a score of 76-100%, sufficient knowledge 56-76% while less knowledge <56%[5].

Based on the description above, the researcher argues that knowledge is directly proportional to the resulting positive attitude. The knowledge of the students and teachers of the Noemuti District has good knowledge because it is based on a qualitative scale above 76%. The knowledge of students and teachers in the Noemuti district in understanding the Covid-19 health protocol is based on the descriptive description given by the researcher in the form of a questionnaire to all respondents. In detail, all respondents have good knowledge, especially related to washing hands, using masks, maintaining distance (physical contact), staying away from crowds, PHBS, and signs of symptoms when sick.

Based on the results of the study, it was found that students and teachers who had a level of compliance were 268 respondents (94,7%) in implementing the Covid 19 health protocol while students and teachers who did not comply were 15 respondents (5,3%) in implementing the health protocol. Covid 19 health protocol.

Compliance is a change in behavior from behavior that does not obey to behavior that obeys the rules. Compliance is health maintenance behavior, namely one's efforts to maintain health or maintain health so as not to get sick and efforts to heal when sick. A person is said to have compliance if he has made all efforts that do not conflict with the rules that have been set.[9]

Good compliance is also able to make a person able to avoid all the risks of diseases that are more life-threatening. The level of compliance can be seen from the act of heeding every aspect of the recommendation to complying with the plans that have been made.[11]

Based on the results of this data, the researcher argues that the level of compliance of the high school students in the Noemuti Sekecematan High School has good compliance in implementing health protocols. The students and teachers have implemented the protocol as referred to by the ministry of health and carried out activities that do not conflict with the rules of the health protocol. Compliance with the health protocols in question, such as washing hands, wearing masks, keeping a distance from crowds, PHBS and if you are sick there are signs and symptoms.

Knowledge relationship with student and teacher compliance in implementing health protocols. The results showed that students and teachers with a good level of knowledge were obedient (96,7%) in implementing the Coronavirus 19 (Covid 19) health protocol and non-compliant (3,3%) in implementing the health protocol. coronavirus 19. Students and teachers with sufficient knowledge have compliance (89,1%) in implementing the coronavirus 19 health protocol and do not comply (10,9%) in implementing the coronavirus 19 health protocol Meanwhile, students and teachers with a low level of knowledge have compliance (83,3%) in implementing the coronavirus 19 health protocol and do not comply (16,7%) in implementing the coronavirus 19 health protocol. Test results chi-square with a level of significance = 0.05, p-value (α) = 0.026 < from value = 0.05, it can be concluded that there is a relationship between knowledge and the level of compliance of students and teachers in implementing the Covid 19 health protocol.

Knowledge is a very important domain to change a person's behavior. Knowledge is directly proportional to a person's level of obedience. Compliance is also influenced by many factors and one of these factors is knowledge. If someone has good knowledge then he can obey by obeying the rules that have been set and carrying out activities or activities that do not conflict with these rules[9]. The knowledge that a person has will

determine behavior to carry out obedience to himself by obeying what has been determined.

High school students and teachers throughout the Noemuti District can implement the Covid 19 health protocol because they have good knowledge. High school students and teachers throughout the Noemuti District have a good perception of behavior and attitudes in carrying out the implementation of the Covid 19 health protocol. Compliance with the Covid 19 health protocol is carried out well because they know the benefits and risks obtained and are supported by adequate knowledge. Lack of knowledge can also affect the level of non-compliance to carry out the Covid 19 health protocol, lack of knowledge can reduce awareness for students and teachers not to comply with the Covid 19 health protocol so that it can have an impact on the risk of increasing Covid 19 cases at the school level.

CONCLUSION

High school students and teachers throughout the Noemuti District can implement the Covid 19 health protocol because they have good knowledge. High school students and teachers throughout Noemuti District have a good perception of behavior and attitudes in carrying out the implementation of the covid 19 health protocol. Compliance with the covid 19 health protocol is carried out well because they know the benefits and risks obtained and are supported by adequate knowledge.

Health-related education is very important to be included in the school curriculum, especially concerning the prevention of infectious diseases. This certainly requires cooperation between educational institutions and health service providers. Good cooperation will certainly increase success in efforts to prevent and improve health status, especially in the area of education.

REFERENCES

1. Kemenkes RI DP. *Pedoman Pencegahan dan Pengendalian Coronavirus Disease (Covid-19)*. Jakarta: Galih Alestya Timur, 2020.
2. Kemenkes RI. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/328/2020 tentang Panduan Pencegahan Dan Pengendalian Corona Virus Disease 2019 (Covid-19) di Tempat Kerja Perkantoran dan Industri dalam Mendukung Keberlangsungan Usaha pada Situasi Pand.
3. CDC C for DC and P. Social distancing, Quarantine and Isolation.
4. Kemenkes RI. Apa yang harus dilakukan masyarakat untuk cegah penularan Covid-19.
5. Nursalam. *Metodologi Penelitian Ilmu Keperawatan Pendekatan Praktis*. 4th ed. Jakarta: Salemba Medika, 2016.
6. Boyoh ME, Kaawoan A, Bidjuni H. Hubungan Pengetahuan dengan Kepatuhan Minum Obat pada Pasien Diabetes Melitus Tipe 2 di Poliklinik Endokrin Rumah Sakit Prof. DR. R. D. Kandou Manado. *J Keperawatan* 2015; 3: 1–6.
7. Sastroasmoro S, Ismael S. *Dasar-Dasar Metodologi Penelitian Klinis*. 5th ed. Jakarta: Sagung Seto, 2016.
8. Yusuf M. *Metode penelitian: Kuantitatif, Kualitatif & Penelitian Gabungan*. Jakarta: Prenada Media Group, 2014.
9. Soekidjo N. *Ilmu Perilaku Kesehatan*. 2014. Epub ahead of print 2014. DOI: 10.1103/PhysRevLett.106.211803.
10. Donsu JD. *Psikologi Keperawatan*. Yogyakarta: Pustaka Baru Press, 2017.
11. Kozier EB. *Buku Ajar Fundamental Keperawatan: Konsep Proses & Praktik*. 7th ed. Jakarta: EGC, 2010.