

Student Knowledge Regarding the Implementation of Covid-19 Health Protocol

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Abstract

Background: Transmission of COVID-19 in the community was caused by the lack of knowledge regarding the virus transmission preventions. This is a trigger for people not to comply with health protocols such as wearing masks, diligently washing hands properly and maintaining physical distance.

Objectives: This study aims to determine the relationship of knowledge to the implementation of the COVID-19 health protocol in students.

Methods: This study uses the descriptive analytic method with a qualitative approach. The subjects of this study were junior high school students aged 13-15 years totaling 89 people who were selected by purposive sampling technique. Data were analyzed univariately using frequency and presentation. Bivariate analysis with Pearson correlation.

Results: The analysis shows that there is no significant relationship between online games and interest in learning with p value of $0.207 > 0.05$ and there is a significant relationship between age and class level on the implementation of the COVID-19 health protocol with a sig value of 0.018 (p value > 0.05).

Conclusion: Overall, most of the respondents have good knowledge, positive attitude, and good practices toward preventing COVID-19. where the student's knowledge becomes a reference for students to behave and behave according to health protocols.

Keywords: student, knowledge, implementation of the covid-19 health protocol

Introduction

Corona Virus Disease-19 or COVID-19 is an infectious disease caused by the SARS-CoV-2 virus or corona virus.¹ This virus spreads very quickly worldwide and reports of cases and deaths are increasing.² Finally, on January 30, 2020, WHO declared Covid-19 a Public Health Emergency of International Concern (PHEIC) or a Public Health Emergency of International Concern.³ According to the World Health Organization (WHO) declared this incident a global pandemic.⁴ The number of COVID-

19 cases globally as of December 2, 2022 from 233 countries confirmed as many as 639.572.819 people were confirmed to have COVID-19, and a death rate of 6.615.258 people. In addition, the community must implement health protocols. In Indonesia, there were 6.674.000 positive cases as of December 2, 2022, with a recovery rate of 6.674.000 people and a death toll of 159.921.⁵ To reduce the number of cases that continue to grow, community behavior to maintain personal hygiene is very important.⁶

Health protocols to prevent the spread of COVID-19 include wearing masks, washing hands, and keeping a distance.⁷ However, this health protocol has not been implemented by the community in an orderly manner.⁸ The cases that occur are experienced by all groups and ages.⁹ Ages at high risk are children, pregnant women, and the elderly.¹⁰ In addition to many people who have not obeyed health protocols regarding the prevention of COVID-19, the public also does not know how to transmit and prevent COVID-19 these.¹¹ Besides, knowledge of how COVID-19 is transmitted is the main factor for a person to behave and behave correctly in the application of healthy living.⁶ The group most at risk and whose knowledge about COVID-19 is still low is the group of children.¹² The gathering place for these groups that violated health protocols the most was in schools. Now, there are still many people who lack an understanding of the Covid-19 protocol, such as the high-risk factors for contracting the disease, how severe the disease is, what are the benefits of preventing it, and a lack of instructions for action. creates a good perception of self-susceptibility, the dangers of disease, and the benefits of prevention efforts.

From the phenomena and data above, the servant is interested in doing community service about student knowledge and compliance with the COVID-19 health protocol implementation at Bandar Lampung Adventist Junior High School. It is hoped that this activity will be carried out to increase the knowledge of teachers, school staff, and school children in preventing COVID-19 so that school children do not contract this virus.

Methods

The design of this research is analytic, namely, research that tries to explore how and why health phenomena occur, with the Person Rank approach where data on independent variables or risks and dependent variables or effect variables are collected at the same time.¹³ In this study, the researcher used a descriptive research design. This type of research was an observational study with a cross-sectional design. The research population was students in grades 7-9 Advent Junior High School, Bandar Lampung. 89 samples were taken using the Random Sampling method. The questionnaires used were student knowledge questionnaires and the COVID-19 health protocol compliance questionnaire. Research Ethics Committee No. 229/KEPK-FIK.UNAI/EC/IV/22. The questionnaire used in research on COVID-19.¹³ The questionnaire has been tested for validity and reliability with the Rasch model measurement with a real item reliability (Real RMSE) level of knowledge of 0.98, and action is 0.99.¹⁴ Data analysis was performed using the SPSS application version 24. Univariate analysis was performed by displaying a frequency distribution table. Then a bivariate analysis was performed by testing the normality of the data first using the Kormolgorov-Smirnov test. Bivariate analysis was performed using the Pearson correlation statistical test. The significance level used in this study is $\alpha=0.05$.

Results

Table 1. Demographic Frequency distribution of respondents (n=89)

Variable	Category	Frequency	Presentation
Gender	Man	49	55.1%
	Woman	40	44.9%

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Age	13 years old	29	32.6%
	14 years old	27	30.3%
	15 years old	33	37.1%
Class	7	29	32.6%
	8	27	30.3%
	9	33	37.1%
Knowledge	7	1.1	1.1%
	8	5.0	5.6%
	9	83.3	93.3%
Protocol Implementation	7	10	11.2%
	8	53	59.6%
	9	26	29.2%

Based on Table 1 above, it is known that most of the respondents were male, namely 49 respondents (55.1%), most of the 15 years old were 33 respondents (37.1%) and most of the 9th graders are 33 respondents (37.1%). The respondents based on the knowledge level of grade 9 are 93%. The respondents based on the Covid-19 class 2 health protocol were 59.6%.

Table 2 Relationship of age and class level to the implementation of the Covid-19 health protocol (n=89)

Variable	N	Mean	Std Deviation	Pearson Correlation Sig 2
Age	89	2.04	0.838	0.018
Protocol Implementation		2.18	0.614	
Class	89	2.04	0.838	0.018
Protocol Implementation		2.18	0.614	

Table 2 shows the results that there is a significant relationship between age and class level on the implementation of the COVID-19 health protocol with a sig value of 0.018 (p-value > 0.05 confidence level).

Table 3 Relationship between knowledge and implementation of Covid-19 health protocols (n=89)

Variable	N	Mean	Std Deviation	Pearson Correlation Sig 2
Knowledge Level	89	2.92	0.310	0, 207
Protocol Implementation		2.18	0.614	

Table 3 shows the results that there is no significant relationship between Knowledge and implementation of the COVID-19 health protocol with a sig value of 0.207 (p-value > 0.05 confidence level).

Discussion

The coronavirus (COVID-19) pandemic is a worldwide health problem because it has an impact on the morbidity and mortality of the global population. This study shows

that most of the respondents (93.3%) in grade 9 have good knowledge about COVID-19. Previous studies have shown high-level knowledge scores about COVID-19.^{15,16} Research conducted by Saqlain et al (2020), Huynh et al (2020) and Bhagavatula et al (2020) found a positive relationship between good knowledge and a positive attitude towards COVID-19.^{17,18,19} Knowledge related to COVID-19 is very important for preparedness to prevent COVID-19 during a pandemic. Transmission of COVID-19 occurs through droplets so transmission is very fast. According to Lawrence Green's Theory, behavior is determined by three factors, namely predisposing factors, driving factors, and reinforcing factors. Knowledge is one of the predisposing factors that influence a person's behavior.²⁰ Individuals who already know certain information tend to be better able to determine and make the right decisions.²¹ The higher people's knowledge or understanding of health, the better their perspective on the concept of health and illness.²² Good knowledge about health can ultimately improve a person's health status.²³ The findings of this study are the same as research findings at the beginning of the outbreak of the COVID-19 outbreak with a population of young people in western Indonesia where the majority of respondents had less knowledge about hand washing practices.²⁴ Another study showed that there was a relationship between respondents' knowledge and COVID-19 prevention behavior in the community.²⁵ According to Rosa et al., (2020)²⁶ washing hands regularly and thoroughly with soap under running water with 6 steps recommended by WHO can kill viruses that may be on hands such as the corona virus (Covid-19). The education provided by the facilitator can increase knowledge about clean and healthy living behavior in preventing Covid-19.²⁷

This study shows that the implementation of the COVID-19 health protocol is highest in grade 8 (59.6%). Previous research has shown that fear can motivate healthy behavior among people, especially during a pandemic, but such behavior may not be sustainable.²⁸ Other studies show found a significant relationship between knowledge about COVID-19 and adherence to wearing masks.²⁹ Knowledge of how to achieve health care, and how to avoid disease, will increase public knowledge.³⁰ According to Sari and 'Atiqoh (2020)³¹ there is a relationship between public knowledge and compliance with the use of masks as an effort to prevent Covid-19 disease. Education about the importance of using masks to prevent and avoid the risk of Covid-19 disease.³² To prevent the spread of COVID-19, people are encouraged to wear masks and wash their hands. The government's recommendations continue to urge the PHBS movement to be the key to preventing the spread of Covid-19 during this pandemic.³³

The results that there is a significant relationship between age and class level in the implementation of the COVID-19 health protocol with a sig value of 0.018 (p-value > 0.05 confidence level). In this study, there was a significant difference between the scores for the implementation of the COVID-19 health protocol and the age level. The results of this study are different from previous research by Maheshwari et al (2020).¹⁵ However, these results are the same as the results of the research shown by Saqlain et al (2020) that there are significant differences between knowledge scores at different age levels.²⁷ Similarities and the differences that occur between these studies are caused by differences in the span or age level carried out in each study.

This study shows that there is no significant relationship between knowledge and implementation of the COVID-19 health protocol with a sig value of 0.207 (p-value > 0.05 level of confidence). The results of this study are in line with studies that state that there is no significant relationship between knowledge about preventing COVID-19 and behavior to prevent transmission of COVID-19.³⁴ Following behavioral theory where good health behavior is preceded by good knowledge and attitude.³⁵ Good public attitudes and behavior regarding preventing the transmission of COVID-19 will be able to break the chain of transmission of this virus.¹ Another factor may be government policies that require the public to comply with health protocols in carrying out their activities. Similarly, the results of research in Malaysia and India at the beginning of the pandemic

showed that the majority of respondents had good knowledge, attitudes, and behaviors related to COVID-19.³⁶ Handling the prevention of the transmission of COVID-19.³⁷ With this perception, it is possible for respondents to not comply with health protocols even though their level of knowledge is high. Experience has an important role in shaping one's attitude. According to Wiranti (2020)³⁸ research conducted by Mushidah and Muliawati (2021)³⁹ in which there is a relationship between the level of knowledge and attitudes about COVID-19 to the level of compliance with the use of masks. Research conducted by Zhong et al, states that there is a significant relationship between knowledge scores and risky behavior toward COVID-19 with a p-value of 0.001 and OR 0.90 (95% CI 0.85 – 0.96) where knowledge becomes a factor preventing the occurrence of risky behavior for the transmission of COVID-19 such as visiting crowded places. The occurrence of a practice can be influenced by several factors, including facilities, family support, and friend support. A positive attitude is influenced by good knowledge, beliefs, thoughts, and emotions. Good knowledge will form good thoughts, beliefs, and emotions so that they can encourage good actions as well.³⁴ The importance of the role of the family and teachers as role models for children in increasing knowledge and implementing the Covid-19 health protocol.

Conclusion

Overall, most of the respondents have good knowledge, positive attitude, and good practices toward preventing COVID-19. where the student's knowledge becomes a reference for students to behave and behave according to health protocols. It is recommended that teachers and parents always supervise and facilitate the application of the use of masks, proper hand washing, social distancing, and physical distancing in preventing the transmission of COVID-19.

Conflict of Interest Declaration

No potential conflict of interest relevant to this article was reported.

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