

Correlation Between Knowledge And Student Preventive Behavior About Covid 19 In Banyuwangi

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ABSTRACT

Introduction: Raising preschool aged children often causes stress to mothers because at this period children are still very dependent on their parents and often have behavioral problems and difficulty in managing their intense emotions.. **Objective:** The purpose of this study was determined to describe the correlation between knowledge and student preventive behavior about covid 19 in banyuwangi. **Methods** The research used correlational analytic study with cross sectional design. The population of this study were college students in Banyuwangi with the existing sample (targeted sample) and were willing to fill out an online questionnaire via google form as many as 138 respondents . To determine the correlation between knowledge and preventive behavior, the rank spearman correlation test was used. **Results:** The relationship between student knowledge and behavior to prevent the spread of the COVID-19 virus obtained a p value of 0.000, which means that there is a significant relationship between knowledge and behavior to prevent the spread of the COVID-19 virus. **Conclusion:** Students are expected to always update their knowledge related to Covid 19, both health students who in the future do practice in hospital services, and non-health students. As well as being able to socialize the importance of PHBS for the prevention of Covid 19 in the community.

ABSTRAK

Latar belakang: Penularan Covid-19 dapat dicegah dengan pengetahuan dan sikap yang baik terhadap masyarakat salah satunya adalah pentingnya peran mahasiswa. mahasiswa dituntut sebagai pelaku dalam masyarakat, karena tidak bisa dipungkiri bahwa mahasiswa merupakan bagian masyarakat. **Tujuan.** Tujuan dari penelitian ini adalah untuk mengetahui hubungan pengetahuan dengan perilaku pencegahan mahasiswa tentang covid 19 di banyuwangi. **Metode :** Penelitian deskriptif kuantitatif dengan pendekatan cross sectional. Adapun populasi penelitian ini adalah mahasiswa Perguruan Tinggi di Banyuwangi dengan sampel yang ada (targeted sample) dan bersedia mengisi kuesioner secara online melalui google form sebanyak 138 responden. Untuk mengetahui hubungan antara pengetahuan dan perilaku pencegahan digunakan uji korelasi rank spearman. **Hasil .:** hubungan Pengetahuan mahasiswa dengan perilaku pencegahan penyebaran Virus COVID -19 didapatkan nilai p value 0.000 yang berarti terdapat hubungan yang signifikan antara pengetahuan dengan perilaku pencegahan penyebaran Virus COVID -19 **Kesimpulan:** Mahasiswa diharapkan selalu memperbarui pengetahuan terkait Covid 19 baik mahasiswa kesehatan yang kedepannya melakukan praktik di pelayanan Rumah Sakit, maupun mahasiswa non kesehatan. Serta bisa mensosialisasikan pentingnya PHBS untuk pencegahan covid 19 di masyarakat.

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Introduction:

Early in 2020, the world was shocked by the incidence of severe infections with unknown causes, which originated from a report from China to the World Health Organization (WHO) where 44 severe pneumonia patients were found in an area, namely Wuhan City, Hubei Province, China, to be precise in the last day of 2019 Chinese. Initial allegations were related to wet markets selling fish, sea animals and various other animals. On January 10, 2020, the cause was identified and the genetic code was obtained, namely the new coronavirus (IDAI,PERDATIN, PDPI, PERKI, 2020)

Coronaviruses are one of viruses that cause disease that causes mild to severe symptoms. There are two types of coronavirus that cause severe symptoms, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Tulandi et al., 2020). Coronavirus Disease 2019 (COVID-19) is a new human disease that has never been studied (Isbaniah, 2020). Signs and symptoms that can arise due to COVID-19 infection include symptoms of acute respiratory disorders such as fever, cough and shortness of breath (Winarti & Hartati, 2020).

The incubation period after being infected with this virus lasts an average of 5-6 days to 14 days (Moudy et al., 2020). In some severe cases of COVID-19 it can cause pneumonia, acute Most of the clinical signs and symptoms reported included fever, difficulty in breathing and some showed extensive pneumonia infiltrates in both lungs on x-rays (Isbaniah, 2020).

SARS-CoV-2 transmission can occur through direct contact, indirect contact, or close contact with an infected person through secretions such as saliva and respiratory tract secretions or airway droplets released when an infected person coughs, sneezes, talks, or sings. Airway droplets have a diameter of $> 5-10 \mu\text{m}$ while droplets with a diameter of $\leq 5 \mu\text{m}$ are referred to as droplet nuclei or aerosols. Airway droplet transmission may occur when someone makes close contact (within less than 1 meter) with an infected

person experiencing respiratory symptoms in a state (when coughing or sneezing) talking or singing, droplets originating from the respiratory tract contain viruses that can reach the mouth, nose, eyes of susceptible people, causing infection. Indirect contact transmission occurs when a susceptible host comes into contact with a contaminated object or surface (phomite transmission) (WHO, 2020). The prevalence was first found at the end of December 2019 in Wuhan China. Until now, according to the wordometer as of April 21, Covid-19 has infected 2,505,443 people and those who died are 172,321. In the USA there were 794,297 cases and 42,564 died, Spain 204,178 cases & 21,282 died, Italy 181,228 cases and 24,114 died, France 155,383 and 20,265 died, Germany 147,593 and 4,869 died, Ukraine 124,743 and 16,509 died, Turkey 90,980 and 2,140 died. Iran 84,802 and 5,297. died China 82,758 and 4,632 died, Russia 52,763 and 456 died. Since Covid-19 was first discovered, the graph of infected cases continues to increase. This virus is spreading rapidly globally, including Indonesia itself. (Chen P, Mao L, Nassis GP, Harmer P, Ainsworth BE, 2020)). Indonesia itself until now, January 10, 2021, there have been 836,718 cases and 24,343 deaths (Isbaniah, 2020).

The transmission of Covid-19 can be prevented with good knowledge and attitude towards society, one of which is the importance of the role of students. Students as abundant resource assets in Indonesia can help the government's role in anticipating hoax news related to COVID-19 by increasing knowledge about the etiology and prevention of COVID-19 (Susanti & Sri, 2020). Students are demanded as actors in society, because it cannot be denied that students are part of society. Ideally, students become examples and role models in society which is based on the level of knowledge, level of education, mindset and norms that apply around it (Antari et al., 2020). Students must have complete knowledge about Covid19 and comply with all program instructions that are announced (Anwar & Khalil, 2020). Thus the program to

prevent the spread of Covid 19 can be carried out in an optimal way. One of the determinants of changes in health behavior is predisposing factors which include knowledge and attitudes (Notoatmodjo, 2010) . Several studies have shown that there is a change in attitude after being given education and counseling about health, providing information increases knowledge and of course can change a person's behavior (Jiang, 2020).

Therefore this study aims to determine the level of knowledge with student prevention behavior about Covid-19. In addition, this study also aims to determine the relationship between the two variables. Of course, the results of this study can be used as a reference in making subsequent decisions in efforts to prevent Covid-19 transmission, especially in Banyuwangi.

Methods:

This research is a descriptive quantitative study with a cross sectional data collection approach. This research was conducted in Banyuwangi Regency in April 2020, by raising the issue of health behavior related to the prevention of Covid 19. The Population was students of the University in Banyuwangi Regency. Determination of the sampling technique used purposive sampling. One hundred thirty-eight students returned the online questionnaire, which was taken randomly at each university in Banyuwangi. Therefore, we selected 138 respondents who were willing to be sampled in this study. The inclusion criteria for selecting samples include active students who graduated in Higher Education in Banyuwangi Regency.

The research instrument consists of four parts, namely for the first part the consent to be research respondents, the second part is demographic data, the third part is a questionnaire on knowledge of Covid-19 prevention, and the fourth part is a questionnaire on student health behavior in an effort to prevent Covid-19. Provided that the validity and reliability tests were carried out on 43 respondents, the results of the test item

validity with the coefficient value of $R_{Count} > R_{Table}$ = Valid, R_{table} N 43 was 0.301. Reliability test using Nunnally criteria, the questionnaire is declared reliability with Cronbach's Alpha $> 60\%$, in this questionnaire the value of Cronbach's Alpha is 64.2%. The Covid-19 prevention behavior questionnaire from the description of the validity and reliability tests above can be concluded as valid and reliable or reliable as a data collection tool. Data analysis of this study used The Spearman rank test with a significance value of more than 0.05'. This research has passed the ethical test with Number 456 / KEPK / STIKES-BWI and takes into account the principles in the research process.

Results:

Table 1. Frequency distribution of respondents based on age, gender, major and level

Variable	Total (N)	Per centage (%)
Sex		
Man	3	2
Women	135	98
Age		
18-24 years	102	74
≥ 25 years	36	26
Department of		
PT	79	57
Health	59	43
Non Health		
Level		
One	63	46
Two	20	14
Three	36	26
Four	19	14

Based on Table 1, it can be seen that the majority of respondents are female as many as 135 respondents (98%), based on the age of the majority of respondents aged 18-24 years (74%) , the frequency of distribution of the majority of education majors is in the health department as much as 79 (57%) respondents and minorities majoring in non-health as much as 59 respondents (6.8%). While the frequency distribution based on

level, the majority at level 1 were 63 respondents (46%) .

Table 2. The frequency distribution by level of knowledge students about prevention Covid-19 in Banyuwangi

Knowledge	Frequency (n)	Percentage(%)
Good	69	50
Enough	63	46
Less	6	4

Based on table 2, it can be seen that half the level of knowledge of respondents about preventing covid 19 in the good category is 69 respondents (50%).

Table 3 Frequency distribution based on student health behavior regarding Covid-19 Prevention in Banyuwangi

Health behavior	Frequency (n)	Percentage(%)
Good	56	41
Enough	66	48
Less	16	11

Based on table 3, it can be seen that almost half of the respondents showed sufficient behavior related to the prevention of Covid 19 as many as 66 respondents (48 %).

Table 4 Relationship between Knowledge and Health Behavior of students in efforts to prevent Covid-19 in Banyuwangi in 2020

Know ledge	Health Behavior						Total	
	Less		Enoug h		Good			
	n	%	n	%	n	%	N	%
Good	6	4	0	0	0	0	6	4
Enou gh	52	38	10	7	1	1	63	46
Less	0	0	14	10	5	40	69	50

Based on table 4, the statistical test results of the relationship between student knowledge and behavior to prevent the spread of the COVID-19 virus, obtained a p value of

0.000, which means that there is a significant relationship between knowledge and behavior to prevent the spread of the COVID -19 virus.

Discussion:

Based on table 2 it can be seen that half of the respondents with the level of knowledge about the prevention of Covid 19 were in the good category as many as 69 respondents (50%) Respondents in this study consisted of students from Nursing, Midwifery, Social Sciences, Law and Religious Education. The respondents' knowledge shows the dominant role of the government in educating the society to form a positive attitude in preventing Covid-19. The use of social media influences the understanding of society to the prevention of Covid-19. During the Covid-19 pandemic, social media plays a role in providing acquisition information to influence affective responses, perceptions, and changes in people's behavior towards Covid-19 prevention (Retnaningsih E, Nuryanto N, Oktarina R, Komalasari O, 2020).

Knowledge is the result of "knowing", and this happens after people sense a certain object. Sensing occurs through the five senses, namely: sight, hearing, smell, taste, and touch. Most of human knowledge is obtained through the eyes and ears (Notoatmodjo, 2010). Knowledge measurement can be done by providing a set of test kits / questionnaires about the object of knowledge to be measured, then an assessment is carried out where each correct answer to each question is given a value of 1 and if it is wrong it is given a value of 0 (Notoatmodjo S, 2012).

Knowledge about Covid 19 can be measured using a questionnaire. Based on the results of the study (Jiang, 2020), Around half of the participants reported adequate or comprehensive knowledge about COVID-19, largely relying on the news media for information about the disease . There are 231 respondents (49%) stating that they have sufficient knowledge related to the prevention of Covid 19. Another study that supports the results of this study is research by Mojally and Al-Hindi, (2020) on health students in Mecca,

Saudi Arabia with the results showing that > 90 students have good knowledge about Covid 19. Sources of knowledge related to Covid-19 are obtained by students from social media, internet, television, ministry of health, WHO and friend information (Alzoubi et al., 2020). Until now the article is written by the Indonesian government together with the health ministry action - significant action in order to improve the provision of information related knowledge with virus transmission prevention education Covid 19 and hazards covid 19 on the public through social media, television, newspapers. The government provides education to the public regarding health protocols when meeting other people, such as always wearing a mask, maintaining a minimum distance of 1 meter, and always washing hands using soap (Mas'udi, 2020).

Based on table 1, more than half of the tertiary education majors are included in the health department, namely as many as 79 respondents (57%). Health students as the vanguard in health service facilities in the future, participate in following the current trend issue of health problems, one of which is the prevention of Covid-19, knowledge and attitudes of health students about the prevention of Covid-19 in Indonesia which can prevent the transmission of Covid-19. in Indonesia (Usman et al., 2020). Based on table 3, it can be seen that almost half of the respondents showed sufficient behavior related to the prevention of Covid 19 as many as 66 respondents (48%).

Based on table 1, it can be seen that the gender of the respondents was mostly women as many as 135 respondents (98%). Gender differences may form different perceptions that affect different attitudes and knowledge between men and women (Saputra & Simbolon, 2020). Prince, (2020) states that gender and education are important social determinants of health that have an impact on health behavior. Gender and education differences affect sedentary behavior. Analysis of answers to questions related to the behavior of maintaining a minimum distance of 1 meter from other people if forced to be in a queue or

crowd, the results showed that 48 respondents (66%) answered always. 44 respondents (32%) answered questions about using masks when leaving the house.

Based on table 4, the Asymp value is obtained. Sig. (2-tailed) or *P* Value = 0.000 shows that there is a relationship between knowledge and student prevention behavior about Covid 19 in Banyuwangi district.

Good knowledge will encourage a positive attitude (Salman et al., 2020), this is shown in this study that the highest percentage of knowledge is in the good category as much as 69 (50%) followed by the percentage of behavior in prevention in the moderate category as many as 66 respondents (48%).

This research is supported by research (Ssebuufu et al., 2020) which states that knowledge is good so it has a good attitude, just as in China, which has good knowledge, has a good attitude in preventing Covid-19 (Salman et al., 2020).

Most respondents (67%) knew how to wash their hands properly, namely by using running water and soap for at least 20 seconds. More than half of the respondents know that washing hands with soap is done regularly, especially before handling the mouth, nose and eyes (74.1%). If there is no hand washing facility, you can use a hand sanitizer. This proves that the behavior of respondents related to the prevention of Covid 19 transmission is quite good, it is shown in the results in table 1 that most of the respondents came from health colleges, namely 79 respondents (57%). According to Notoatmodjo, knowledge is a very influential cognitive domain. in shaping one's actions. Acceptance of new behavior will be more lasting if it is based on knowledge, whereas the behavior will not last long without being based on knowledge (Silalahi, C., Lampus, B., Akili, R., Sam, U., Manado, 2013)

Conclusions:

Based on the results of the study showed half the level of knowledge of respondents about preventing covid 19 in the good category is 69 respondents (50%). That

almost half of the respondents showed sufficient behavior related to the prevention of Covid 19 as many as 66 respondents (48 %). The results of statistical analysis showed that the results of Sig. (2-tailed) or P Value = 0,000 indicated that there was a relationship between knowledge and student prevention behavior about Covid 19 in Banyuwangi district .

Suggestions:

Students are expected to always update their knowledge related to Covid 19, both health students who in the future do practice in hospital services, and non-health students. As well as being able to socialize the importance of PHBS for the prevention of Covid 19 in the community.

The results of this study can be developed by further researchers in increasing the number of samples and developing into qualitative research or mix methods

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