
Determinant Factors Related To Covid-19 Prevention Behavior In Students At State Vocational School 3 Palembang

Eva Susanti¹⁾, Yulisa Tri Hasanah²⁾

¹⁾ Poltekkes Kemenkes Palembang

²⁾ Poltekkes Kemenkes Palembang

*Corresponding Author

Email : evasusanti@poltekkespalembang.ac.id

Abstract

COVID-19 prevention behavior is the main factor to break the chain of the spread of the COVID-19 disease. Behavioral determinants really determine students in implementing preventive measures against COVID-19. The purpose of this study was to determine the determinants of COVID-19 prevention behavior in students at State Vocational School 3 Palembang. This type of research is a quantitative research with a cross sectional research design. The population in this study were all students of State Vocational School 3 Palembang with the number of respondents 361 students, with a minimum sample size of 342. Data collection in this study was carried out using online and offline. The sampling method used is simple random sampling technique. Data analysis used Chi-square statistical test and logistic regression. The results of this study found a significant relationship between gender, knowledge, and attitudes towards COVID-19 prevention behavior in students at State Vocational School 3 Palembang. While the most dominant variable is attitude.

Keywords: Determinant Factors, Behavior, COVID-19.

INTRODUCTION

Corona Virus Disease (COVID-19) is a disease caused by a new type of coronavirus that is highly contagious, causing general symptoms such as fever, weakness, cough, convulsions, diarrhea, to pneumonia. The number of cases infected with COVID-19 continues to increase and spread very quickly to almost all over the world and has been declared a global pandemic on March 11, 2020 (Ahmad & Baharuddin, 2020).

According to data released from the official website of the World Health Organization as of January 21, 2021, it is stated that positive confirmed cases of Corona in the world have reached 97,425,574 cases, with the death toll reaching 2,086,210 people (WHO, 2020). Data obtained up to January 21, 2021, the Ministry of Health reported 951,651 confirmed cases of COVID-19 with 27,203 deaths (Kemenkes RI, 2020). Data from the Covid19.go.id page, in South Sumatra Province there were 13,336 confirmed cases of corona positive with a death toll of 671 people. Meanwhile, in the city of Palembang, through the dinkes.palembang.go.id page, it stated that the confirmed cases of corona positive reached 6,336 cases, the number of patients recovered was 4,931 and the death rate was 297 people.

COVID-19 is a serious problem with the number of cases increasing every day. This virus can infect anyone regardless of age or gender. (WHO, 2020). According to research (Habibie, 2020) a survey conducted by UNICEF in 2020 about COVID-19 on 4,000 teenagers showed that 25% or 1,000 teenagers did not know anything about COVID-19, while some teenagers knew the symptoms of this disease, but did not know how to prevent it. .

In addition to knowledge, attitudes also play an important role in determining a person's behavior. Adolescents who behave unfavorably tend to lead to negative behavior and vice versa that adolescents who have good attitudes also have positive preventive behavior (Firman et al., 2018).

Irawan's 2017 book explains that behavior is influenced by 3 factors, one of which is predisposing factors which are manifested in knowledge, attitudes, beliefs, values and so on. Based on the results of a preliminary study conducted by researchers on January 11, 2021, according to one of the administrative staff of SMK Negeri 3 Palembang, research on determinant factors related to COVID-19 prevention behavior in students at Vocational High School 3 Palembang has never been done. Students of SMK Negeri 3 Palembang as the young generation who have a high willingness to learn are expected to be able to educate families and communities so that students must have good knowledge, attitudes and behavior regarding COVID-19. For this reason, researchers are interested in conducting research on determinant factors related to behavior prevention of COVID-19 in students at the 3 Palembang State Vocational High School.

RESEARCH METHODS

This type of research is a quantitative research with a cross sectional research design. The population in this study were all students of SMK Negeri 3 Palembang with the number of respondents 361 students, with a minimum sample size of 342. Data collection in this study was carried out using online and offline. The sampling method used is simple random sampling technique. Data analysis used Chi-square statistical test and logistic regression.

RESULTS AND DISCUSSION

The research was conducted on 17 May – 01 June 2021 at SMK Negeri 3 Palembang. The results obtained are:

1. Univariate Analysis
 - a. Distribution of respondents based on the characteristics

Table 1
Distribution of the Average Age of
Respondents to Students at SMK Negeri 3 Palembang in 2021

Variable	n	Mean	SD	Minimum- Maximum	95% CI
Age	361	16,14	1,058	14-19	16,03- 16,25

Table 5.1 above describes the age frequency distribution of students at SMK Negeri 3 Palembang. The average age of respondents is 16.14 with an age range of 14-19 years. The standard deviation value is 1.058. From the results of the interval estimation, it can be concluded that it is 95% believed that the average age of the respondents is between 16.03 to 16.25.

Table 2
Distribution of Respondents Frequency by Gender and Grade at SMK Negeri 3 Palembang in 2021

Variabel	n	%
Gender		
- Male	88	24,4
- Female	273	75,6
Grade		
- X Grade	171	47,3
- XI Grade	149	41,3
- XII Grade	41	11,4

Table 2 above describes the frequency distribution of respondents by gender and class in students of SMK Negeri 3 Palembang. The majority of respondents were female with a total of 273 (75.6%) and the highest number of respondents was class X which amounted to 171 (47.3%).

b. Frequency Distribution of Respondents Based on Knowledge, Attitudes, and Behavior of COVID-19 Prevention in Students at SMK Negeri 3 Palembang

Table 3
Distribution of Respondents Frequency Based on Knowledge, Attitudes, and Behavior of COVID-19 Prevention in students at SMK Negeri 3 Palembang in 2021

Variable	n	%
Knowledge		
- Good	230	63,7
- Moderate	131	36,3
Attitude		
- Positive	197	54,6
- Negative	164	45,4
Behavior		
- Positive	193	53,5
- Negative	168	46,5

Table 3 above illustrates the frequency distribution of knowledge, attitudes, and behaviors to prevent COVID-19 among students at SMK Negeri 3 Palembang. It was found that respondents with good knowledge were 230 respondents (63.7%), while respondents with poor knowledge were 131 respondents (36.3%). Respondents with positive attitudes were 197 respondents (54.6%), while respondents with negative attitudes were 164 respondents (45.4%). Respondents with positive behavior were 193 respondents (53.5%), while respondents with negative attitudes were 168 respondents (46.5%).

2. Abivariate Analysis

Table 4
Distribution of the Relationship of Gender, Knowledge, and Attitudes with COVID-19 Prevention Behavior in Students at SMK Negeri 3 Palembang in 2021

Variable	Behabior Category				OR (95% CI)	p value
	Positive		Negative			
	n	%	n	%		
Gender						
- Male	37	42	51	58	0,544	0,014
- Female	156	57,1	117	42,9		
Knowledge						
- Good	142	61,7	88	38,3	2,531	0,000
- Moderate	51	38,9	80	61,6		
Attitude						
- Positive	124	62,9	73	37,1	2,339	0,000
- Negative	69	42,1	95	57,9		

Table 4 above the results of data analysis shows that gender, knowledge, and attitudes are statistically related to COVID-19 prevention behavior in students at SMK Negeri 3 Palembang.

3. Multivariate Analysis

Table 5
Logistic Regression Model to see the Relationship of Gender, Knowledge, and Attitude with COVID-19 Prevention Behavior in Students at SMK Negeri 3 Palembang in 2021

Variable	Exp (B)	95% CI		p- value
Gender	1,733	1,040	2,888	0,035
Knowledge	0,463	0,294	0,730	0,001
Attitude	0,455	0,294	0,705	0,000
Constant	1,000			

Table 5 above shows that the COVID-19 prevention behavior in students at SMK Negeri 3 Palembang is jointly influenced by the variables of gender, knowledge, and attitudes. While the attitude variable is the most influential variable on the COVID-19 prevention behavior in students at SMK Negeri 3 Palembang with a p-value of 0.000.

Based on the research that has been done, the average age of the respondents is 16.14 years. The majority of respondents are female and are in grade X. The number of respondents with good knowledge is 230 (63.7%), respondents with positive attitudes are 197 (54.6%), respondents with positive behavior are 193 (53.5%) .

Based on the results of the study, it showed that there was a relationship between gender and COVID-19 prevention behavior in students at SMK Negeri 3 Palembang. This study is in line with research conducted by (Suharmanto, 2020) which showed that there was a relationship between gender and prevention of COVID-19 transmission.

Research conducted by (Pratiwi et al., 2020) and (Sari et al., 2020) states that women have a

better level of behavior than men. The explanation from (Mc Muray, 2003), states that there are perceptions and expectations between men and women. Men are more likely to emphasize the state of not being sick while women tend to be more concerned about environmental conditions and their health. In this study, the researchers assumed that this is what makes women more likely to have positive behavior compared to men.

The results showed that there was a significant relationship between knowledge and COVID-19 prevention behavior in students at SMK Negeri 3 Palembang. Knowledge is the most important thing in determining a person's behavior (Rajaratenam et al., 2014). Knowledge will form subsequent beliefs in perceiving reality, thus providing a basis for making decisions and determining a person's behavior towards certain objects (Novita et al., 2013).

This is in line with research conducted by (Prihati et al., 2020), (Purnamasari, 2020), and (Zhong BL, 2020) which concluded that good knowledge is closely related to good behavior in preventing COVID-19 infection. This shows that knowledge has a great influence on the behavior carried out. Researchers assume that knowledge determines a person's behavior towards certain objects, because the better a person's knowledge, the easier it is to determine what to do in his life. In line with what was stated by (Prihantana, 2016) that knowledge is the basis for making decisions, because knowledge can be the basis for making choices.

The results showed that there was a significant relationship between attitudes and COVID-19 prevention behavior in students at SMK Negeri 3 Palembang. This is in line with research conducted by (Mudawaroch, 2020) and (Derito, 2020) showing that there is a relationship between attitudes and COVID-19 prevention behavior.

Research by (Abdelhafiz et al., 2020) and (Firman et al., 2018) states that respondents with good attitudes also have positive preventive behavior. It is the same with research conducted by (Zhong et al., 2020) which states that the behavior of preventing COVID-19 in people in China is influenced by knowledge and attitudes.

Attitude is a predisposing to form a behavior (Charika et al., 2014). Attitudes also play an important role in determining a person's behavior (Yanti et al., 2020).

Students with positive attitudes tend to have positive behavior as well. The results of this study are also in accordance with the theory put forward by (Notoatmojo, 2010), which states that it is a very important domain in the formation of a person's behavior where attitude is a very important concept in the socio-psychological component, because it is a tendency to act, and perceive. A positive attitude will tend to encourage someone to behave positively as well.

Based on the results of research and theory (Notoatmojo, 2003) the researcher assumes that attitude is not yet an action or activity, but is still a predisposition to the action of a behavior. A person's attitude will affect behavior, a positive attitude will affect positive behavior as well. While a negative attitude will produce negative health behavior as well.

The positive attitude in this study was that the respondents were correct in their attitude about what things should be done in an effort to prevent COVID-19. The respondent's positive attitude may be due to the respondent's good knowledge and the formation of a good attitude so that it gives birth to a good mindset to form positive behavior.

Based on Table 5.5, it shows that there is an influence of gender, knowledge and attitudes on COVID-19 prevention behavior in students at SMK Negeri 3 Palembang. Of the three variables, the determinant factor related to the behavior of preventing COVID-19 in students at SMK Negeri 3 Palembang is the attitude variable with a p value 0.000.

According to researchers, knowledge and attitudes are important in shaping behavior. Good knowledge will create positive behavior and positive attitudes will form positive behavior. The better the students' knowledge about COVID-19, the more they should realize the importance of preventive behavior against COVID-19. After having good knowledge, a positive attitude will be

formed which will then affect students' actions in carrying out COVID-19 prevention behavior. This is in line with the theory (Notoatmojo, 2007), behavior change occurs through a process of change: knowledge, then becomes an attitude, then action in doing something including behavior.

CONCLUSION

Based on the results of research that has been carried out on the Determinants of COVID-19 Prevention Behavior in Students at SMK Negeri 3 Palembang, it can be concluded that this study provides information about factors related to COVID-19 prevention behavior in students at SMK Negeri 3 Palembang. Factors related to COVID-19 prevention behavior are gender, knowledge, and attitudes. While the most dominant variable is attitude, where students who have a positive attitude tend to have positive behavior as well.

REFERENCES

- Abdelhafiz, A. S. et al.2020. *Knowledge, Perceptions, and Attitude of Egyptians Towards the Novel Coronavirus Disease (COVID-19).*, Journal of community health. Springer US. doi: 10.1007/s10900-020-00827-7.
- Ahmad, A. S., & Baharuddin, R. (2020). *Faktor yang Mempengaruhi Kecemasan pada Tenaga Kesehatan Dalam Upaya Pencegahan Covid-19.* 57–65.
- Charika, W., Dwi Hermawan, A., & Ridha, A. (2014). *Hubungan Antara Pengetahuan, Sikap, Akses Informasi HIV dan AIDS dan Dukungan Keluarga Dengan Perilaku Pencegahan HIV dan AIDS Pada Pengguna NAPZA Suntik di kota Pontianak.* Jurnal Mahasiswa Dan Penelitian Kesehatan- Jumantik, 1 (1), 163-172.
- Dardas, L. A., Khalaf, I., Nabolsi, M., Nassar, O., & Halasa, S. (2020). Developing an Understanding of Adolescents' Knowledge, Attitudes, and Practices Toward COVID-19. *Journal of School Nursing*, 36(6), 430–441. <https://doi.org/10.1177/1059840520957069>
- Data Profil Kesehatan di Kota Palembang. dinkes.palembang.go.id. di akses pada tanggal 21 Januari 2021.
- Derito, M. D. (2020). Hubungan Antara Pengetahuan Dan Sikap Terhadap Perilaku Pencegahan Covid-19 Pada Mahasiswa Kedokteran Di Provinsi Aceh.
- Firman, Yusran Haskas, & Akmal. (2018). Pencegahan Penggunaan Napza Di Sma Negeri 21 Makassar. 12, 665–669.
- Habibie, N. (2020). UNICEF Survei 4.000 Remaja Terkait Covid-19, 70 persen Percaya Langkah Pemerintah. Merdeka.com. di akses melalui <https://www.merdeka.com/peristiwa/unicef-survei-4000-remaja-terkait-covid-19-70-persen-percaya-langkah-pemerintah.html>.
- Irwan. (2017). Etika dan Perilaku Kesehatan. CV.Absolute Media.
- KEMENTERIAN KESEHATAN RI. (2020). Situasi COVID-19 Informassi lain. <https://covid19.kemendes.go.id/situasi-infeksi-emerging/info-coronavirus/situasi-terkini-perkembangan-coronavirus-disease-covid-19-21-januari-2020/>

- Mc Muray, A., (2003). *Community Health and Wellness: socioecological approach*. 2nd ed. Sydney: Mosby.
- Mudawaroch, R. E. (2020). Pengaruh Pengetahuan dan Sikap Terhadap Perilaku Mahasiswa dalam Menghadapi Virus Corona. 362, 257–263.
- Notoadmojo, S. (2007). *Promosi Kesehatan dan Ilmu Perilaku*. Jakarta: Rineka Cipta.
- Notoadmojo, S. (2010). *Promosi Kesehatan, Teori dan aplikasi dalam Perilaku Kesehatan*. Edisi Kedua. Jakarta: Rineka Cipta, pp. 43-64.
- Notoatmodjo, S. (2003). *Pendidikan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- Novita, N. W., Yuliasuti, C., & Narsih, S. (2013). Tingkat Pengetahuan tentang TB Paru Mempengaruhi Penggunaan Masker Di Ruang Paru Rumkit Al Dr. Ramelan Surabaya.
- Pratiwi, M. S. A., Yani, M. V. W., Putra, A. I. Y. D., Mardiana, I. W. G., Adnyana, I. K. A., Putri, N. M. M. G., Karang, N. P. S. W. A., & Setiawan, I. P. Y. (2020). Hubungan Karakteristik Individu Terhadap Perilaku Mengenai Covid-19 Di Desa Gulingan, Mengwi, Bali. *Jurnal Kesehatan*, 13(2), 112. <https://doi.org/10.24252/kesehatan.v1i1.16340>
- Prihantana, A. S., & Wahyuningsih, S.S. (2016). Tingkat Kepatuhan Pengobatan Pada Prijonegoro Sragen. II(1).
- Purnamasari I, Reharyati AE. (2020). Tingkat Pengetahuan dan Perilaku Masyarakat Kabupaten Wonosobo Tentang Covid-19. *J Ilmu Kesehatan*.
- Rajaratnam, S. G., Martini, R. D., & Lipoeto, N. I. (2014). Artikel Penelitian Hubungan Tingkat Pengetahuan dan Sikap dengan Tindakan Pencegahan Osteoporosis pada Wanita Usia di Kelurahan Jati. 3(2), 225–228.
- Sari, A. R., Rahman, F., Wulandari, A., Pujianti, N., & Laily, N. (2020). Perilaku Pencegahan Covid-19 Ditinjau dari Karakteristik Individu dan Sikap Masyarakat. *Jurnal Penelitian Dan Pengembangan Kesehatan Masyarakat Indonesia*, 1(1), 32–37 <https://journal.unnes.ac.id/sju/index.php/jppkm>
- Wawan, A., & M, D. (2018). *Teori & Pengukuran Pengetahuan, Sikap dan Perilaku Manusia*. Nuha Medika.
- WHO. (2020). *Coronavirus disease (COVID-19) Situation Report-114*. Di akses dari <https://www.who.int/docs/default-source/coronavirus/situation-reports/20200513-covid-19-sitrep-114>.
- Yanti, B., Mulyadi, E., Wahiduddin, Novika, R. G.H., Arina, Y. M., Martani, N. S., & Nawan. (2020). Original Article Community Knowledge, Attitudes, And Behavior Towards Social Distancing Policy As A Means Of Preventing Transmissions Of Covid-19 In Indonesia. 8(1). <https://doi.org/10.20473/jaki.v8i2.2020.4-14>.
- Zhong BL, Luo W, Li HM, et al. Knowledge, attitudes, and practices towards COVID-19 among chinese residents during the rapid rise period of the COVID-19 outbreak: A quick online cross-sectional survey. *Int J Biol Sci*. 2020;16(10):1745-1752.