http://ejournal.seaninstitute.or.id/index.php/healt
Jurnal eduhealth, Volume 13, No 02, 2022
E-ISSN., P-ISSN. 2087-3271

Students Readiness to Do Direct Learning during the Reemerging Covid-19 Pandemic

Anak Agung Istri Wulan Krisnandari D[1], Ni Made Sri Rahyanti[2], Gst. Kade Adi Widyas Pranata[3]

[123]Bachelor of Nursing Program, Faculty of Health, Institute of Technology and Health Bali, Bali, Indonesia

ARTICLE INFO

Keywords:
Students,
Readiness,
Direct Learning.

Email :
wulankrisnandari.itekesbali@gmail.com

ABSTRACT

Coronavirus Disease 2019 (Covid-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). To anticipate the spread of this virus, government make a regulation that change the learning activity at school from offline to online. However, in mid-May 2021, with the decreasing number of Covid-19 cases, the government began preparing for direct learning activities. The aim of this study was to determine the student readiness to do direct learning. This study used descriptive correlation research using a cross sectional approach. Sampled that have been used in this study were 472 students from one college in Bali. The sampling technique used is total sampling. Data was collected using questionnaire "Learning Readiness Survey Questionnaire during The Covid-19 Pandemic", that divided into three parts: a). Respondent characteristics, readiness to do direct learning, exposure and Covid-19 vaccine history, and medical history b). Knowledge related to Covid-19, and c). Health behavior during Covid-19 pandemic. Data that has been collected then analyzed using a descriptive test to determine the description of student readiness to do direct learning. The result from this study shows that the majority of students stated that they were ready to do direct learning (89%). Most of them also already got Covid-19 vaccine (98,5%). Majority of the students also have a good understanding regarding Covid-19 (>80%) and implemented Covid -19 prevention behaviour (>90%).

1. INTRODUCTION

Coronavirus Disease 2019 (Covid-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (Kemenkes, 2020). SARS-CoV-2 is a new type of coronavirus that has never been previously identified in humans. The spread of this virus occurs between humans through droplets such as coughing, sneezing, and when talking, and touching objects or surfaces that have the virus, then touching the eyes, nose or mouth (WHO, 2020). A person infected with Covid-19 can show mild, moderate, to severe symptoms. Common signs and symptoms of COVID-19 infection include symptoms of acute respiratory distress such as fever, fatigue, cough and shortness of breath (Pascarella et al., 2020). In severe cases of COVID-19 it can cause pneumonia, acute respiratory syndrome, kidney failure and even death (Cascella et al., 2022). The Covid-19 case was first identified in Wuhan, China, at the end of 2019. The increase in the number of cases which occurred quite quickly, as well as the spread to various countries in a short time, led WHO to designate COVID-19 as a pandemic case. This disease has become a pandemic case in almost all parts of the world, including Indonesia. In Indonesia itself, the first case of Covid-19 appeared in March 2020. Cases increased and spread rapidly throughout Indonesia. Until the end of 2020, there were 748,486 positive cases of Covid-19 in Indonesia, of which 22,183 people were declared dead (Kemenkes, 2021a).

As an effort to anticipate the spread of the Covid-19 virus, the government adopted a policy to implement Large-Scale Social Restrictions, which in principle were implemented to suppress the wider spread of COVID-19. During the PSBB implementation, one of the principles used was physical restrictions and social activities (Satuan Tugas Penanganan COVID-19, 2020). Physical restrictions and

social activities are activities to maintain physical distance between individuals, where this can be done one way or another by: maintaining a minimum distance of 1 meter from the surrounding people, not shaking hands, not hugging and kissing, studying and working from home, avoiding using public transportation , and prohibited from gathering in crowds and public facilities (Kemenkes, 2020). This restriction has an impact on almost all sectors of life in society, including the education sector. The government implements learning from home rules at all levels of education. This causes learning activities in schools to change from offline to online (online) (Grande et al., 2022).

Thanks to the participation of all sectors in implementing the health protocol, approximately 1 year since the emergence of the Covid-19 case in Indonesia, the development of positive confirmed cases per day has decreased, from 8,074 cases per day at the end of 2020, to 2,385 cases per day in mid-May 2021(Kemenkes, 2021a). In addition implementation of the health protocol, the activity of injecting the Covid-19 vaccine is also known to be one of the supporting factors for the decrease in the daily number of Covid-19. This decrease in the number of cases and the wider coverage of the Covid-19 vaccine, is the basis for the government to restart social activities in the community, one of which is the face-to-face learning plan. Preparations have also been made to restart these activities, such as checking and ensuring the availability of hand washing facilities using soap and running water, periodic spraying of disinfectants in the school environment, as well as setting up space and learning atmosphere (Kementerian Pendidikan dan Kebudayaan, 2021).

But unfortunately, since the beginning of June 2021, Indonesia has been hit again by the "second-wave" period of Covid-19. Where on July 4 2021, the number of positive confirmed cases reached 27,233 people per day (Kemenkes, 2021a). The resurgence of Covid-19 cases has led to the emergence of many questions in various circles, especially regarding the discourse on the start of face-to-face learning in this new school year. Questions such as "How ready are the government, educational institutions, and students to continue face-to-face learning plans", are things that need to be discussed further.

Unfortunately, until now, the available information and research has focused more on the availability of regulations in program implementation and the readiness of educational institutions as organizers of face-to-face learning activities. While references related to the readiness of students in undergoing face-to-face learning are still very minimal. Learners (student) are one of the subjects who will directly experience and receive the impact of face-to-face learning, so that their readiness is one of the things that needs to be studied.

2. METHOD

This study used a descriptive research design with a cross sectional approach. This research was carried out for two months, July - August 2021. The population in this study were ITEKES Bali students, with a total number of student were 1831 people. The sampling method that has been used is total sampling, where students who meet the inclusion criteria will be included in this study. The inclusion criteria used in this study were: having status as an active student at ITEKES Bali, willing to participate in research and agreeing to fill out the provided informed consent, having electronic communication media in the form of WhatsApp (WA), being able to used electronic survey media (google form), and have the ability to understand Indonesia. The sampled that used in this study were 472 people.

Data collection in this study used an instrument in the form of a “Learning Readiness Survey Questionnaire during The Covid-19 Pandemic”. This instrument is divided into three parts: a). Respondent characteristics, readiness to do direct learning, exposure and Covid-19 vaccine history, and medical history (7 questions) b). Knowledge related to Covid-19 (6 questions), and c). Health behavior during Covid-19 pandemic (4 questions). This questionnaire has known to have “acceptable” content validity to measure the readiness of students to do direct learning.

The data has been collected is then analyzed using SPSS program by using a descriptive test to determine the description of student readiness to do direct learning.

3. RESULTS AND DISCUSSION

3.1 Characteristic of the Respondent, Readiness to do Direct Learning, Exposure and Covid-19 Vaccine History, and Medical History

Table 1. Characteristic Respondent (n=472)

Characteristic	Frequency (n)	Percentage (%)
Gender		
Male	92	(19,5%)
Female	380	(80,5%)
Age (Year)		
18-20	200	(42,4%)
21-30 year employee	247	(42,4%)
>30	25	(5,2%)
Study Program		
Nursing	264	(55,9%)
Midwifery	39	(8,3%)
Anesthesiology	132	(28,0%)
Pharmacy	30	(6,4%)
Food Technology	7	(1,5%)

Characteristics of respondents in this study, namely gender, age, and study program. Based on the results of data collection, it can be explained that the majority of respondent in this study was female (80,5%), with the age around 18to 20 years old (42,4%). While for the study program, majority of respondent was from nursing (55,9%) and anesthesiology (28,0%).

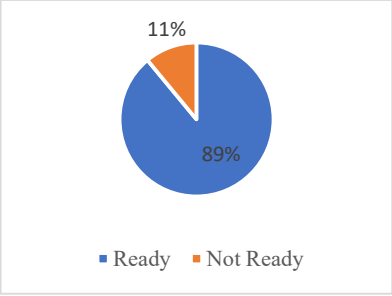
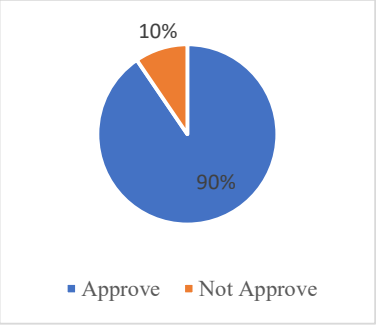


Figure 1. Student Readiness to Do Direct Learning



Picture 2. Family Approval to Join Direct Learning

From picture 1 and 2, it was found that majority of respondent in this study was stated ready to do direct learning (89%) and their family give consent to join direct learning (90%).

Table 2. Exposure of Covid-19, Covid-19 vaccine history, and Medical history (n=472)

Statement	Frequency & Percentage n (%)
Exposure of Covid-19	
Ever	24 (5,1%)
Never	448 (94,9%)
Vaccine History	
Have	465 (98,5%)
Not have	7 (1,5%)
Vaccine Sequence	
0	7 (1,5%)
1	34 (7,2%)
2	411 (87,1)
3	20 (4,2%)
History of Comorbid Disease	
Have	8 (1,7%)
Not Have	464 (98,3%)

For the exposure of Covid -19, majority of the respondent stated that they never had Covid-19(94,9%). Then for the vaccine history, most of the respondent already got vaccinated (98,5%), which majority of them got the second vaccine (87,1%). Meanwhile for the medical history, majority of the respondent state that they don't have history of comorbid disease (98,3%).

3.2 Knowledge Related to Covid-19

Table 3. Respondent's knowledge related Covid-19 (n=472)

Statement	Correct Answer n (%)
Droplet from saliva or nose and mouth can transmit Covid-19	456 (96,6%)
Fever, cough, fatigue, difficulty in breathing are indications of being exposed to Covid-19	461 (97,7%)
People without symptoms of Covid-19, still can transmit the virus to others	394 (83,5%)
People with comorbidities (such as high blood pressure, heart and lung problems, diabetes, cancer, etc) are susceptible to exposed to Covid-19	423 (89,6%)
Washing hands with soap and water can prevent the spread of Covid-19	467 (98,9%)
Using a mask and maintaining effective distance prevent the spread of Covid-19	470 (99,6%)

From table 3, it was found that majority of respondent in this study had a good knowledge related to Covid-19, where more than 80% of the respondent correctly answered every questions related to Covid-19.

3.3 Health Behavior during Covid-19 Pandemic

Table 4. Respondent's behavior during Covid-19 pandemic (n=472)

Behavior	Frequency & Percentage n (%)
Washing Hand With Soap and Water	
Yes	448 (94,9%)
No	24 (5,1%)
Using Mask	
Yes	472 (100%)
Practice Cough Etiquette	
Yes	452 (95,8%)
No	20 (4,2%)
Practice Physical Distancing	
Yes	438 (92,8%)
No	34 (7,2%)

Health behavior during Covid-19 pandemic in this study were washing hand, using mask, cough etiquette, and physical distancing. From table 3, it was found that majority of the respondent already washed their hand using soap and water (94,9%), applied cough etiquette (95,8%), and did physical distancing (92,85). Meanwhile for using mask, it was found that all respondent already did this behavior to prevent Covid-19.

4. CONCLUSION

4.1 Readiness to do Direct Learning, Exposure and Covid-19 Vaccine History, and Medical History

The Covid-19 pandemic has caused major changes to the dynamics of life. Restrictions on activities in all sectors that have been going on for approximately 1.5 years have led to the emergence of new habits in society. In the education sector, during this period, students were used to learning using online methods. However, at this time, the government has re-launched the discourse of returning to learning using the direct learning method. This change certainly requires the readiness of various parties, not only educational institutions, but also students (in this case students). Readiness is said to be a state of being ready to do something (Setiaji & Dinata, 2020). Readiness can also be said as the ability that a person has in responding to what is being faced (Sinta, 2017). Readiness in carrying out the direct learning method is all the efforts made by someone in dealing with this learning. For students, this describes the abilities and all forms of effort that must be made to participate in these learning activities.

In this study, the majority of students (89%) stated that they were ready to take part in learning using the direct learning method. This was influenced by the saturation of students to take part in online learning. This statement is supported by previous research related to student perceptions of online learning during the Covid-19 pandemic. In this study, students complained about the difficulty of communicating when undergoing online learning, so this led to learning dissatisfaction (Amir et al., 2020). In addition, there are several other external and internal challenges that cause students to become uncomfortable with carrying out online learning, such as unstable internet connections, extra spending to buy internet quota, ineffective time management, and difficulty maintaining focus when attending long-term online learning (Amir et al., 2020). This causes most students to prefer to return to learning using the direct learning method.

Apart from students, the majority of parents and families (90%) of the students in this study stated that they were ready to give permission for their children to undergo direct learning. This is influenced by parents' concerns regarding online teaching and learning activities which are felt to be less effective

(Affrida & Hasiana, 2022). This concern is mostly caused by the excessive use of gadgets and the accumulation of tasks as compensation during the implementation of online learning. These things cause the majority of parents or families to prefer learning to be changed back to direct learning.

Regarding the readiness of students in facing learning with the direct learning method, there are several factors that need to be prepared, including physical readiness, psychological readiness, and material readiness (Jannah et al., 2020). Of these three factors, physical readiness plays an important role for students in participating in direct learning. affect one's immune system. In addition, when carrying out direct learning, students will also meet their peers, so this will increase the risk of physical contact which is very closely related to the spread of the SAR-Cov-2 virus. So, in order to deal with this, the physical condition of students is very important to be prepared.

One of the efforts to improve students' physical readiness in facing direct learning is through the provision of the Covid-19 vaccination. Vaccines are biological products that contain antigens in the form of microorganisms or parts thereof or substances they produce that have been processed in such a way as to be safe, which when given to someone will cause active specific immunity against certain diseases (Kemenkes, 2021b). The provision of the Covid-19 vaccination aims to provide a person with specific immunity against exposure to the SAR-Cov-2 virus, so that if one day is exposed to the disease, that person will not get sick or only experience mild symptoms. Based on the results of this study, it is known that until August 2021, the majority of students (98.5%) in this study stated that they had received the Covid-19 vaccination. It is known that around 87.1% of students in this study had received the second Covid-19 vaccine, 7.2% had just received the first Covid-19 vaccine, while 4.2% had received the third Covid-19 vaccine (booster). The high coverage of Covid-19 vaccination for these students can be an indicator of students' readiness to undergo face-to-face learning. Through high vaccination coverage, it is hoped that herd immunity will be formed (Purnamasari & Raharyani, 2021). Herd Immunity is a situation in which a large part of the population is protected/immune against certain diseases resulting in an indirect impact, namely the protection of vulnerable groups in society and is not a target for vaccination (Kemenkes, 2021b).

4.2 Knowledge Related to Covid-19

From the results of this study, it is known that students have good knowledge about Covid-19. This is evidenced by the majority of students (> 80%) being able to answer correctly every question related to Covid-19. In this study, knowledge about Covid-19 was drawn through questions related to methods of spreading and transmitting the Covid-19 virus, risk factors for Covid-19, signs and symptoms of Covid-19, and methods of preventing Covid-19. Regarding the method of spreading and transmitting the Covid-19 virus, it is known that 96.6% of students know that splashes of liquid originating from saliva or nose and mouth can spread the Covid-19 virus. This result is in line with previous research, where a significant number of the students reported good awareness about the modes of virus transmission (Hasan et al., 2021; Salman et al., 2020). It is known that the main transmission of the Covid-19 virus is through direct contact with droplets originating from infected people and indirect contact with surfaces or objects used on infected people (Kemenkes, 2020). Apart from through droplets, as many as 83.5% of students also know that someone who is infected with the Covid-19 virus, even though they do not show symptoms of the disease (pre-symptomatic), this person is still capable of transmitting the virus to others. This is in line with previous studies which reported that 12.6% of Covid-19 cases were from pre-symptomatic transmission (Du et al., 2020).

Regarding the risk factors for Covid-19, as many as 89.6% of students know that people who have a history of comorbid diseases (such as high blood pressure, heart and lung disease, diabetes mellitus, cancer, etc.) have a higher risk of contracting Covid-19 . Similar results were also shown in previous studies, in which more than 80% of students knew that having a comorbid disease was a risk factor for contracting Covid-19 (Hasan et al., 2021; Linawati et al., 2021).

Other knowledge that many students know is about the signs and symptoms of Covid-19. The majority of students (97.7%) in this study knew the signs and symptoms of someone who indicated positive for Covid-19, namely fever, cough, fatigue, and shortness of breath. This is in line with previous

research, where the majority of students know the most common symptoms of Covid-19 (Hasan et al., 2021; Olaimat et al., 2020). In addition, students in this study were also known to have good knowledge about methods of preventing Covid-19. As many as >90% of students know that washing hands with running water soap and wearing a mask can prevent the spread and transmission of Covid-19. These results are known to be in accordance with previous research, where the majority of respondents knew ways to prevent Covid-19(Linawati et al., 2021).

4.3 Health Behavior during Covid-19 Pandemic

Transmission of COVID-19 generally occurs through direct contact with droplets containing the SARSCoV-2 virus that enter the body through the nose, mouth and eyes. So as to prevent this from happening, there are several actions that can be taken, such as: cleaning your hands regularly, using personal protective equipment in the form of a mask, maintaining a minimum distance of 1 meter from other people, limiting yourself from interaction / contact with other people who are not known health status, when arriving home after traveling, immediately showering and changing clothes before contact with family members at home, increasing immunity by adopting a clean and healthy lifestyle, managing co-morbidities/comorbidities to keep them under control, managing mental and psychosocial health, and apply cough etiquette (Kemenkes, 2020).

In this study, the behavior of preventing transmission of Covid-19 that is discussed places more emphasis on washing hands with soap and running water, using masks, applying cough etiquette, and implementing physical distancing. This is because these four things are simple actions that students can take, wherever they are, but still have a large protective impact. According to the research results, it is known that the majority of students have implemented Covid-19 prevention measures. From the results of this study it is known that the majority of students have implemented measures to prevent the transmission of Covid-19, where as many as 94.9% of students are known to have implemented the behavior of washing their hands using soap and running water. In addition, it is known that all students (100%) are known to be accustomed to wearing masks, 95.8% of students have implemented cough etiquette, and as many as 92.8% of students have implemented physical distancing. These results are in line with research conducted on students at the United Arab Emirates (UAE), where more than 90% of students are known to have implemented Covid-19 prevention behaviors (Hasan et al., 2021).

The high behavior of preventing the transmission of Covid-19 in this study, one of which was influenced by the knowledge factor possessed by students regarding Covid-19. The majority of students in this study were known to have good knowledge about Covid-19, such as methods for spreading and transmitting the Covid-19 virus, risk factors for Covid-19, signs and symptoms of Covid-19, and methods for preventing Covid-19. Knowledge is known to be one of the predisposing factors that can influence a person's behavior (Linawati et al., 2021). When a person has sufficient information about Covid-19, this can direct him to the right behavior in dealing with it. This statement is also supported by several previous studies which found a significant relationship between knowledge and behavior in preventing Covid-19 (Sari & Sholihah'Atiqoh, 2020; Susanti & Sri, 2020; Zhong et al., 2020). Where someone with a good level of knowledge has a greater tendency to carry out Covid-19 prevention behavior.

5 CONCLUIONS

From the results of research on students' readiness for direct learning during the resurfacing Covid-19 pandemic, it is known that the majority of students (89%) stated that they were ready to undergo direct learning. In addition, most parents and families (90%) of students also stated that they were ready to give permission for their children to take part in direct learning. Regarding readiness, the majority of students (98.5%) in this study had also received the Covid-19 vaccination. In addition to physical readiness, this study also explains students' knowledge regarding Covid-19, and student behavior in preventing transmission of Covid-19. Regarding knowledge, it is known that most students (> 80%) already have good knowledge about Covid-19. Where students are able to answer questions correctly, regarding how the spread and transmission of the Covid-19 virus, the risk factors for Covid-

19, the signs and symptoms of Covid-19, and how to prevent Covid-19. As for behavior, it is known that most students have implemented steps to prevent the transmission of Covid-19, such as washing hands with soap and running water, wearing masks, applying cough etiquette, and implementing physical distancing.

REFERENCES

[1] Affrida, E. N., & Hasiana, I. (2022). Kesiapan Psikologis Anak Dan Orangtua Dalam Menghadapi Pembelajaran Tatap Muka. Kanigara, 2(2), 419–424.
[2] Amir, L. R., Tanti, I., Maharani, D. A., Wimardhani, Y. S., Julia, V., Sulijaya, B., & Puspitawati, R. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. BMC Medical Education, 20(1), 1–8.
[3] Cascella, M., Rajnik, M., Aleem, A., Dulebohn, S. C., & Di Napoli, R. (2022). Features, evaluation, and treatment of coronavirus (COVID-19). Statpearls [Internet].
[4] Du, Z., Xu, X., Wu, Y., Wang, L., Cowling, B. J., & Meyers, L. A. (2020). Serial Interval of COVID-19 among Publicly Reported Confirmed Cases—Volume 26, Number 6—June 2020—Emerging Infectious Diseases journal—CDC.
[5] Grande, R. A. N., Berdida, D. J. E., Cruz, J. P., Cometa-Manalo, R. J., Balace, A. B., & Ramirez, S. H. (2022). Academic motivation and self-directed learning readiness of nursing students during the COVID-19 pandemic in three countries: A cross-sectional study. Nursing Forum, 57(3), 382–392.
[6] Hasan, H., Raigangar, V., Osaili, T., Neinavaei, N. E., Olaimat, A. N., & Aolymat, I. (2021). A cross-sectional study on university students' knowledge, attitudes, and practices toward COVID-19 in the United Arab Emirates. The American Journal of Tropical Medicine and Hygiene, 104(1), 75.
[7] Jannah, M., Bustamam, N., & Yahya, M. (2020). Kesiapan diri mahasiswa dalam menghadapi perkuliahan daring. JIMBK: Jurnal Ilmiah Mahasiswa Bimbingan & Konseling, 5(3).
[8] Kemenkes. (2020). Pedoman Pencegahan dan Pengendalian Coronavirus Disease (Covid-19). https://doi.org/10.33654/math.v4i0.299
[9] Kemenkes. (2021a). Peta Sebaran Covid-19. https://covid19.go.id/id/peta-sebaran-covid19
[10] Kemenkes. (2021b). Question (Faq) Pelaksanaan Vaksinasi Covid-. Kesmas, 2(1), 1–16. kesmas.kemkes.go.id
[11] Kementerian Pendidikan dan Kebudayaan. (2021). BukuSaku FAQ SKB 4 Meneteri 21122021. 2019.
[12] Linawati, H., Helmina, S. N., Intan, V. A., Oktavia, W. S., Rahmah, H. F., & Nisa, H. (2021). Pengetahuan, Sikap, dan Perilaku Pencegahan COVID-19 Mahasiswa. Media Penelitian Dan Pengembangan Kesehatan, 31(2), 125–132.
[13] Olaimat, A. N., Aolymat, I., Shahbaz, H. M., & Holley, R. A. (2020). Knowledge and information sources about COVID-19 among university students in Jordan: a cross-sectional study. Frontiers in Public Health, 8, 254.
[14] Pascarella, G., Strumia, A., Piliego, C., Bruno, F., Del Buono, R., Costa, F., Scarlata, S., & Agrò, F. E. (2020). COVID-19 diagnosis and management: a comprehensive review. Journal of Internal Medicine, 288(2), 192–206.
[15] Purnamasari, I., & Raharyani, A. E. (2021). Upaya Perlindungan Masyarakat terhadap Covid-19 dengan Pemberian Vaksinasi. Jurnal Peduli Masyarakat, 3(4), 379–388.
[16] Salman, M., Mustafa, Z. U., Asif, N., Zaidi, H. A., Hussain, K., Shehzadi, N., Khan, T. M., & Saleem, Z. (2020). Knowledge, attitude and preventive practices related to COVID-19: a cross-sectional study in two Pakistani university populations. Drugs & Therapy Perspectives, 36(7), 319–325.

[17] Sari, D. P., & Sholihah'Atiqoh, N. (2020). Hubungan antara pengetahuan masyarakat dengan kepatuhan penggunaan masker sebagai upaya pencegahan penyakit Covid-19 di Ngronggah. Infokes: Jurnal Ilmiah Rekam Medis Dan Informatika Kesehatan, 10(1), 52–55.
[18] Satuan Tugas Penanganan COVID-19. (2020). COVID-19 Handling Behavior Change Guidelines. Satgas Covid19, 60. https://covid19.go.id/storage/app/media/Materi Edukasi/Pedoman Perubahan Perilaku 18102020.pdf%0Ahttps://covid19.go.id/p/protokol/pedoman-perubahan-perilaku-penanganan-covid-19
[19] Setiaji, B., & Dinata, P. A. C. (2020). Analisis kesiapan mahasiswa jurusan pendidikan fisika menggunakan e-learning dalam situasi pandemi Covid-19. Jurnal Inovasi Pendidikan IPA, 6(1), 59–70.
[20] Sinta, V. (2017). Pengaruh kesiapan belajar terhadap hasil belajar mata pelajaran ekonomi kelas x di SMA Bina Jaya Palembang. Jurnal Ilmiah Pendidikan Dan Ekonomi, 1(1), 11–20.
[21] Susanti, R., & Sri, N. (2020). Hubungan pengetahuan mahasiswa dengan perilaku pencegahan penyebaran virus Covid-19. PROMOTIF: Jurnal Kesehatan Masyarakat, 10(2), 160–166.
[22] WHO. (2020). Coronavirus Disease (Covid-19). https://www.who.int/health-topics/coronavirus#tab=tab_1
[23] Zhong, B.-L., Luo, W., Li, H.-M., Zhang, Q.-Q., Liu, X.-G., Li, W.-T., & Li, Y. (2020). 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. International Journal of Biological Sciences, 16(10), 1745.