



Stress And Efforts by Students in Learning During Covid-19 Pandemic

Mamnuaah

^{1*)} School of Nursing, Faculty of Health Sciences, Universitas 'Aisyiyah Yogyakarta

ARTICLE INFO

Article history:

Received 2 February 2021
Accepted 4 May 2021
Published 25 June 2021

Keyword:

COVID-19
Effort
Learning
Stress
Students

ABSTRACT

Students who experience stress during online learning are quite high. Stress will have an impact on student life in the future. For this reason, it is necessary to explore the stress experienced by students. The purpose of this study was to explore the stress and efforts made by health students in undergoing online learning. This research is qualitative with a phenomenological approach. The number of samples was 6 health students. Sampling was by purposive sampling. Data were analyzed using the Collaizi technique. The results showed that there were four themes of stress experienced by students, namely: perceptions of stress, feelings during stress, signs of stress symptoms, and causes of stress. The efforts made have two themes, namely: internal and external efforts. Students experience stress during online learning and make efforts to deal with the stress they experience. The results of this study provide important information for better learning management to anticipate student stress during the pandemic period.

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Stres Dan Upaya Yang Dilakukan Mahasiswa Dalam Menjalani Pembelajaran Selama Pandemi Covid-19

ABSTRAK

Mahasiswa yang mengalami stres selama pembelajaran daring cukup tinggi. Stres akan memberikan dampak dalam kehidupan mahasiswa di masa yang akan datang. Untuk itu perlu dilakukan eksplorasi tentang stress yang dialami mahasiswa. Tujuan penelitian ini adalah menggali stress dan upaya yang dilakukan mahasiswa kesehatan dalam menjalani pembelajaran daring. Penelitian ini adalah kualitatif dengan pendekatan fenomenologi. Jumlah sampel sebanyak 6 mahasiswa kesehatan. Pengambilan sampel dengan cara purposive sampling. Data dianalisis dengan menggunakan teknik Collaizi. Hasil penelitian menggambarkan stress yang dialami mahasiswa ada empat tema, yaitu: persepsi tentang stress, perasaan selama stress, tanda gejala stress, dan penyebab stress. Upaya yang dilakukan ada dua tema, yaitu: upaya internal dan eksternal. Mahasiswa mengalami stress selama pembelajaran daring dan melakukan upaya untuk mengatasi stress yang dialami. Hasil penelitian ini memberikan informasi penting untuk pengelolaan pembelajaran yang lebih baik untukantisipasi stres mahasiswa selama masa pandemi.

Kata kunci:

COVID-19
Mahasiswa
Pembelajaran
Stress
Upaya

**) corresponding author*

School of Nursing, Faculty of Health Sciences, Universitas 'Aisyiyah Yogyakarta
Jl. Siliwangi (Ring Road Barat) No. 63 Mlangi
Nogotirto Gamping Sleman 55292, (0274)
4469199 Fax.: (0274) 4469204

Email: mamnuaah@unisayogya.ac.id

DOI: 10.30604/jika.v6i2.502

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



INTRODUCTION

Corona virus infection was first discovered in the city of Wuhan, China at the end of December 2019 (IPKJI, 2020). Furthermore, the World Health Organization (WHO) has determined the status of a pandemic since March 11, 2020, which means that the COVID-19 problem is a problem for all countries around the world. This virus is spreading very quickly and has spread to almost all countries. The number of positive cases of COVID-19 in the world on May 16, 2021, was 162,177,376 and the number who died was 3,364,178 people (WHO, 2021). Indonesia announced the first case of COVID-19 on March 2, 2020, the discovery of 2 Indonesian citizens who were exposed to the COVID-19 virus. Data in Indonesia dated May 16, 2021, the number of confirmed positive cases of COVID-19 was 1,739,750 people, the death rate reached 48,093 people, and the cure rate reached 1,600,857 people (BNPB, 2021). This figure continues to increase so that it affects the psychology of the people in Indonesia.

Pandemic brings many changes in a person's life in all aspects of life. Restrictions on human movement also have psychological effects, such as stress, anxiety, insomnia, anger, irritability, and depression (Hiscott et al., 2020). Research Islam et al., (2020) also explained that 85.60% of respondents experienced stress related to COVID-19 and caused a sense of concern that would hamper future study and career plans.

Research abroad also explains that students experience stress due to the COVID-19 pandemic. Pandemic also has the effect of limiting a person, including students, it causes stress on students (Husky et al., 2020). The results showed that 0.9% of respondents experienced severe anxiety, 2.7% moderate anxiety, and 21.3% mild anxiety. Moreover, those who live in urban areas (OR = 0.810, 95% CI = 0.709 - 0.925), family income stability (OR = 0.726, 95% CI = 0.645 - 0.817) and living with parents (OR = 0.752, 95% CI = 0.596 - 0.950) is a protective factor against anxiety. Having a relative or acquaintance infected with COVID-19 is a risk factor for increasing student anxiety (OR = 3,007, 95% CI = 2,377 - 3,804). The results of the correlation analysis showed that economic effects, and effects on daily life, as well as delay in academic activities, were positively associated with symptoms of anxiety ($P < 0.001$), whereas social support was negatively correlated with anxiety levels ($P < 0.001$). The study suggested that students' mental health should be continuously monitored during the pandemic (Cao et al., 2020).

Previous research mostly used a quantitative method approach as done by Tarquinio et al., (2021) researching the factors that most influence the occurrence of stress in students is the presence of family members who are treated for COVID-19 and female gender. Another study also showed that private university students (80.6%) were found to be more stressed than public university students (77%) due to the uncertainty of online classes and high tuition fees (Shafiq et al., 2021). There has not been much exploratory research conducted to explore the stress experienced by students during online learning and the efforts made to deal with stress. Research conducted by Nishimura, (2021) also uses a quantitative approach to analyze the impact of research on the psychological pressure of medical students. Results 29.8% of students reported concerns about online learning. Research Chaturvedi et al., (2021) surveyed about stress and anxiety experienced by 1182 students in India. This research also uses a quantitative approach. For this reason, qualitative research is needed to explore student stress while

undergoing online learning. The purpose of this study was to explore the stress and efforts made by students during learning during the COVID-19 pandemic.

METHOD

This study used a qualitative design with a phenomenological approach. The sampling technique was purposive sampling. The sample was 6 students of the Faculty of Health Sciences at a private university in Yogyakarta, Indonesia. The sampling method used was purposive sampling. The participant inclusion criteria were: health science faculty students whose student status was active, at least 18 years old, and in a conscious state and not suffering from physical illnesses. The exclusion criteria were students who were sick and were not able to be interviewed. Data were collected through in-depth interviews once. The researcher also made field notes to describe situations that were not recorded by the recording device during the interview process. Interviews were conducted via video call and recorded based on participant consent. Data validation was performed by method triangulation, analysis triangulation, and validation with participants. Data analysis using Collaizi. Data analysis was carried out by making transcripts, reading repeatedly the results of interview quotations and statements, creating categories, determining sub-themes and main themes.

This study pays attention to the ethical principles of research, namely: confidentiality, anonymity, and autonomy. The data collection process has received permission from the Research Ethics Committee of 'Aisyiyah Yogyakarta University with number 1720 / KEP-UNISA / X / 2020.

RESULTS AND DISCUSSION

Participants are 6 students of the Faculty of Health Sciences, consisting of three female and three male. The age of the youngest participants was 18 years old and the oldest was 24 years old. The level of education varies from diploma, bachelor, and master. Participants are currently undergoing semesters 3, 5, and 7. Four participants live with their parents at the time of the online interview, while two people live in a boarding house in Yogyakarta. Originally the participants came from Yogyakarta and outside Yogyakarta. Participant data can be seen in Table 1.

This study describes the stress and efforts made by students while undergoing online learning in the COVID-19 pandemic era. There are four themes related to stress experienced by students while undergoing online learning, namely: perceptions of stress, the feelings experienced, signs and symptoms of stress, and causes of stress. The efforts made by students to deal with stress have two themes, namely: internal and external efforts. Each theme will be explained.

Perceptions of Stress

Participants perceive stress as a condition of someone who is facing many problems, with unstable emotions, and is unable to overcome these problems. Stress occurs when a

person has a load of thoughts that exceeds the limit of ability in an unstable emotional state, as expressed as follows:

Stress is like we have a lot of burdens on the mind. Later it can become stressful. (P1)

Stress is where the load condition exceeds one's limits. (P3)

Stress is a condition in which we experience emotional instability. (P4)

Table 1
Characteristics of participants

Initial	Age	Sex	Education	Semester	Live in	Origin
P1	20	Female	Diploma	5	Parent's house	Yogyakarta
P2	22	Male	Bachelor	5	Parent's house	Yogyakarta
P3	24	Female	Master	3	Parent's house	South Sumatera
P4	18	Male	Bachelor	3	Boarding house	Maluku
P5	20	Male	Diploma	5	Parent's house	Central Java
P6	21	Female	Bachelor	7	Boarding house	Central Sulawesi

Feelings experienced during online learning

The feelings experienced by participants while undergoing online learning in the era of the COVID-19 pandemic were verbalizing the feelings they experienced, namely: sadness, confusion, stress, tiredness, and boredom. Participants feel sad because they should practice in the hospital but because of the pandemic, they cannot practice. Practical learning is carried out by watching videos as well as when skills evaluation is carried out using makeshift practicum tools at home, as expressed as follows:

My feelings are sad because I should have practiced in a hospital but couldn't because of the pandemic. There are many cases of pathology that we have to do but can only learn from the video. When we were evaluated, we were also confused, finally the assessment used makeshift tools. (P1)

Other participants said that online learning made participants feel tired, bored, and no longer focused on taking online learning. Participants have closed the camera while learning via zoom, sometimes ignoring the zoom that is followed, as stated as follows:

I feel tired of attending online lectures. When I was studying online, the camera was closed, sometimes I left it everywhere, and I rarely focused. It's been too long zooming, I'm bored. (P3)

Signs and Symptoms of Stress

Signs and symptoms of stress experienced by participants in online learning in the pandemic era are physiological changes and behavioral changes. Physiological changes that are experienced are sleep disturbances in the form of reduced sleep needs, dizziness, and eating disorders. Participants only slept for one hour during online learning, usually sleeping at 03.00 am and waking up at 04.30 am. Participants also complained of headaches and dizziness. Participants lost their appetite when experiencing stress, as described as follows:

When I am really stressed, sometimes I feel lazy to eat. (P5)

Sleep only one hour, if I sleep at 3:00 a.m. and wake up at 4:30 a.m. so it only takes a moment. (P3)

Headaches, dizziness but I just endure it. (P4)

Participants also experienced behavioral changes experienced during online learning, namely the behavior of throwing things and withdrawing, especially when

experiencing stress. Participants threw books and notes in their house, as disclosed as follows:

I slammed and threw books and notes. I swear, I didn't lie because I got dizzy with online learning until I threw down my books and notes. (P4)

When I was stressed, I just stayed at home and didn't do anything. I just stay alone in the bedroom. I thought about when I could complete the assignment. I do self-reflection. (P2)

Cause of stress

The causes of stress experienced by participants while undergoing online learning in the pandemic era are related to signals, quotas, assigned tasks, and limited communication. Participants complained that the signal was difficult, even though they had many tasks and had deadlines. The existence of limited communication with lecturers and other students when online makes it difficult to understand the material. This also causes stress to students. Participants also said that the most difficult task is to make a video and then upload the video. This condition requires a long manufacturing time and large quota, as described below:

The task of making videos is the most stressful. (P4)

When there is an assignment to be asked to upload a video, it is a very consuming quota, especially on YouTube. Youtube is at least 15-20 minutes long and can run out 1 gigabyte more. (P2)

Efforts made by students to deal with stress experienced

The efforts made by students in overcoming stress have two themes, namely: internal efforts and external efforts. Internal efforts are all efforts made by themselves in dealing with perceived stress, while external efforts are efforts made by participants through outside assistance. The themes will be described as follows:

Internal Efforts

Participants made internal efforts to reduce the stress experienced during the online learning period in the COVID-19 pandemic era, namely by doing relaxation, time management, and spirituality. Participants relax by playing games on their cellphones, reading novels, watching Korean dramas, and walking around the house. Other internal efforts made are by praying and remembering Allah SWT, as expressed as follows:

I read light books, like novels, usually watch Korean dramas, watch first rather than stress. (P6)

When I am stressed, first don't forget to pray, because praying can prevent us from stress, remembering Allah SWT. (P4)

External Efforts

Participants make external efforts through seeking outside support, namely contacting friends and asking for family help. When experiencing stress, looking for friends to find wifi because the signal is not strong enough. Sometimes discussions with other groups or friends. Participants also asked their parents for help and complained with their parents, as disclosed as follows:

Recently, I left the house because I had an assignment that required a strong internet signal. I went out with a friend looking for wifi. When there is a problem, I tell my parents, my parents tell me to be patient and learn again. (P1)

The findings show that the stress experienced by students while undergoing online learning during the COVID-19 pandemic has four themes, namely: perceptions of stress, the feelings experienced, signs and symptoms of stress, and causes of stress. The perception of stress according to the participants was a condition of many problems, unstable emotions, and could not be overcome. Previous research results illustrated that students' perceptions about the Covid-19 crisis and nursing students' experiences during learning during the pandemic were different (Lovrić et al., 2020). Students experience stress, such as the results of previous research that out of 248 International School of Business students in the Netherlands, showed a strong correlation between anxiety, loneliness, and stress-related to COVID-19 (Misirlis et al., 2020).

The feelings that participants experience during online learning are verbalizing the feelings they experience, namely: sadness, confusion, stress, fatigue, and boredom. Participants felt stressed with online learning, this is following the results of research by Islam et al., (2020) explaining that around 85.60% of respondents experienced stress related to COVID-19. Other research also explains that there is a relationship between the occurrence of COVID-19 and the occurrence of stress in students (Ye et al., 2020; Wang, 2020). Online learning also causes stress to students (Sundarasan, 2020; Lyons, 2020; Sarah, 2021). Other studies have also suggested that dentistry students experience stress, depression, and anxiety (Kwaik, 2021). Medical students also experience anxiety and depression facing online learning (Nishimura, 2021). Prolonged contact with digital devices increases student stress and anxiety (Mheidly, 2020). Female students have higher stress levels than male students (Abdulghani, 2020; O'Byrne, 2020).

Signs and symptoms of stress that were felt by participants during online learning were physiological changes and behavioral changes. Physiological changes that are experienced are sleep disturbances in the form of reduced sleep needs, dizziness, and eating disorders. The results of these studies are following the research Islam et al., (2020) explained that this online study resulted in a shortened sleep period. Another study also caused sleep disturbances as many as 168 students (86%) (Son et al., 2020). Another study reported that 67.05% experienced symptoms of traumatic stress, 46.55% experienced symptoms of depression, and 34.73% reported symptoms of anxiety. There were 19.56% supporting the idea of suicide (Sun et al., 2020). Research Lovrić et al., (2020) reported that students also had difficulty concentrating in learning.

The causes of stress on participants during online learning are related to signals, quotas, assigned tasks, and limited communication. The results of this study are following the research (Pham & Shi, 2020), participants experienced internet difficulties, lack of personal interaction, and an unusual learning process. This study also explains that two aspects directly cause mental disorders in students. First, physical factors, for example living conditions, internet difficulties, overwhelmed health care systems, limited travel, lack of personal interaction, limited access to public services. Second, psychological factors, for example, anxiety about unusual teaching modalities, fear of viral infection, uncertain career aspects, cultural barriers, and prejudice. Another study explained that during the COVID-19 pandemic, students found it difficult to communicate with supervisors (Amir et al., 2020). It was also experienced by students in this study that online learning made students experience limitations in communicating with lecturers and other students. This condition causes difficulty in the understanding course material. Research Debbarma & Durai, (2021) causes student stress in online learning due to bad networks so that student and teacher communication becomes poor. Another obstacle is finance so that students cannot meet the requirements needed in online learning.

Research Livana et al., (2020) about the causes of student stress during a pandemic caused by learning assignments (70.29%), boredom at home (57.8%), online learning process that began to be boring (55.8%), not being able to meet people loved ones (40.2%), cannot participate in online learning due to signal limitations (37.4%), cannot carry out hobbies as usual (35.8%), and cannot apply practical laboratory learning due to unavailability of tools. The results showed that learning assignments were a major factor in student stress during the COVID-19 pandemic. Research by Son et al., (2020) stated that 31% of health students felt that they were given too many assignments and were difficult to do. This research is in line with what has been done that the learning task that is most burdensome to students during online learning is giving assignments in the form of making videos. The task of making videos was given at the same time and the short limit for submitting assignments made students feel heavy. Students experience difficulties in making videos in terms of content, how to make, and the upload process because they require resources and financial resources to support the success of the video-making process. Students who feel heavy with the assignments given during online learning and cause stress, anxiety, and depression (Fawaz, 2021).

Another study in Indonesia was conducted by Kusnayat et al., (2020) regarding the influence of online college learning technology in the COVID-19 era and its impact on student mental. This research was conducted on 30 students from two universities. This shows the results that around 60.5% of students are ready to adapt to the use of online lecture learning technology, but around 59.5% of students object to the assignment given by the lecturer which results in a student stress level of around 60%. If this is allowed to continue, it will have fatal consequences in the mental development of students, and as many as 92% of students choose and prefer face-to-face lectures in class over online lectures.

Stress management efforts

Participants try to reduce stress in two ways, namely: internal and external. Participants made internal efforts to

reduce the stress experienced during the online learning period in the COVID-19 pandemic, namely by doing relaxation, time management, and spirituality. The way that students relax is to forget about assignments for a while by taking a break, walking around the house, reading novels, watching Korean dramas, and playing games. Playing this game helps students reduce the stress they experience. This is in line with research in India on the impact of lockdown after the COVID-19 pandemic on students because students are prone to stress. This has a lot to do with their academic and future career prospects. The study aims to assess student gaming behavior during the lockdown. As a result, more than half (50.8%) of the participants reported that their gaming behavior had improved, while 14.6% reported a decrease in their playing during the lockdown period. In binary logistic regression analysis, gameplay hours per day (odds ratio [OR] 1.75 [1.29-2.36]), increased gaming due to examination-related stress (OR 4.96 [1.12-21.98]), and the belief that gaming helps manage stress (OR 4.27 [1.65-11.04]), was found to be independently associated with gaming behavior during the lockdown period. An increase in gaming behavior was associated with stress-related to exams and the belief that playing games help cope with stress. These observations highlight the need to focus on students' coping styles to ascertain their likelihood of engaging in gaming behavior as a coping mechanism for stress (Balhara et al., 2020). Students who regularly engage in religious activities have lower stress levels (Abdulghani, 2020).

External efforts made by health students are carried out through activities to find support outside of themselves, namely contacting friends and asking for family help. To deal with stress and anxiety, students have sought support from others and helped themselves by adopting negative or positive coping mechanisms (Son et al., 2020; Michele, 2020). Based on the results of research by Lee et al., (2013), family support will affect students' ability to complete studies. Students who have good family support will complete their education well. Students still need parental guidance and counseling even after entering university. This is because there are major changes in learning styles and changes in the environment from school to university (Arshad Erum Shahzadi & Mahmood, 2016). The results of this study have implications as information about stress and the efforts made by health students during online learning. The hope is that it can be used as a reference in the online learning process to reduce the stress experienced by students.

Limitation Of The Study

The limitation of this research is that the research results cannot be generalized so that they only describe stress and efforts to deal with stress in the research location.

CONCLUSIONS AND SUGGESTIONS

There are four themes of stress experienced by students during online learning, namely: perceptions of stress, feelings during stress, signs, and symptoms of stress, and causes of stress. Students perceive stress as a serious problem. Feelings experienced during online learning include feeling sad, stressed, confused, tired, and bored. Interrupted needs during online learning are physiological disturbances (sleep, eating) and changes in behavior (temperamental). Efforts are made to deal with stress during

online learning by internal and external means. The internal effort is done by doing relaxation, time management, and spirituality. The external effort is done by seeking support from friends and parents.

It is hoped that educational institutions reduce the task of making videos and collecting assignments at almost the same time. Future researchers are expected to develop further research on interventions to improve students' ability to manage stress well during online learning.

Acknowledgment

Thank you to the PP Muhammadiyah Diktilitbang Council for providing financial support through the Batch 4 Research Grant Program of the PP Muhammadiyah Diktilitbang Council.

Conflict of Interest Statement

The authors declare no conflict of interest, financial or otherwise

REFERENCES

- Abdulghani, H. M. (2020). Association of COVID-19 pandemic with undergraduate medical students' perceived stress and coping. *Psychology Research and Behavior Management, 13*, 871–881. <https://doi.org/10.2147/PRBM.S276938>
- 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). <https://doi.org/10.1186/s12909-020-02312-0>
- Arshad Erum Shahzadi, M., & Mahmood, A. (2016). *Parents Involvement at University Level Education: Students Perception in Under Developing Country. 12*(22), 1857–7881. <https://doi.org/10.19044/esj.2016.v12n22p294>
- Balhara, Y. S., Kattula, D., Singh, S., Chukkali, S., & Bhargava, R. (2020). Impact of lockdown following COVID-19 on the gaming behavior of college students. *Indian Journal of Public Health, 64*(6), 172. https://doi.org/10.4103/ijph.IJPH_465_20
- BNPB. (2021). *Jumlah Terpapar Covid-19 di Indonesia*. <https://www.facebook.com/InfoBencanaBNPB>
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research, 287*, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Chaturvedi, K., Vishwakarma, D. K., & Singh, N. (2021). COVID-19 and its impact on education, social life and mental health of students: A survey. *Children and Youth Services Review, 121*(July 2020), 105866. <https://doi.org/10.1016/j.childyouth.2020.105866>
- Debbarma, I., & Durai, T. (2021). Educational disruption: Impact of COVID-19 on students from the Northeast states of India. *Children and Youth Services Review, 120*, 105769. <https://doi.org/10.1016/j.childyouth.2020.105769>
- Fawaz, M. (2021). E-learning: Depression, anxiety, and stress symptomatology among Lebanese university students during COVID-19 quarantine. *Nursing Forum, 56*(1), 52–57. <https://doi.org/10.1111/nuf.12521>
- Hiscott, J., Alexandridi, M., Muscolini, M., Tassone, E., Palermo, E., Soultsioti, M., & Zevini, A. (2020). The global impact of the

- coronavirus pandemic. *Cytokine and Growth Factor Reviews*, 53(May), 1–9. <https://doi.org/10.1016/j.cytogfr.2020.05.010>
- Husky, M. M., Kovess-masfety, V., & Swendsen, J. D. (2020). Stress and anxiety among university students in France during Covid-19 mandatory confinement. *Comprehensive Psychiatry*, 102, 152191. <https://doi.org/10.1016/j.comppsy.2020.152191>
- IPKJI. (2020). *Dukungan Kesehatan Jiwa dan Psikososial Mental Health and Psychosocial Support Covid-19: Keperawatan Jiwa*. IPKJI.
- Islam, S. M. D. U., Bodrud-Doza, M., Khan, R. M., Haque, M. A., & Mamun, M. A. (2020). Exploring COVID-19 stress and its factors in Bangladesh: A perception-based study. *Heliyon*, 6(7), 1–10. <https://doi.org/10.1016/j.heliyon.2020.e04399>
- Kusnayat, A., Sumarni, N., Mansyur, A. S., Zaqiah, Q. Y., & Bandung, U. T. (2020). Pengaruh Teknologi Pembelajaran Kuliah Online Di Era Covid-19 Dan Dampaknya. *EduTeach: Jurnal Edukasi Dan Teknologi Pembelajaran*, 1(2), 153–165.
- Kwaik, A. A. (2021). Stress, anxiety and depression among dental students in times of covid-19 lockdown. *International Journal of Dentistry and Oral Science*, 8(2), 1397–1401. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85101737400&origin=inward>
- Lee, Y., Choi, J., & Kim, T. (2013). Discriminating factors between completers of and dropouts from online learning courses. *British Journal of Educational Technology*, 44(2), 328–337. <https://doi.org/10.1111/j.1467-8535.2012.01306.x>
- Livana, Fatkhul Mubin, M., & Basthomi, Y. (2020). “Tugas pembelajaran” penyebab stres mahasiswa selama pandemi covid-19. *Jurnal Ilmu Keperawatan Jiwa*, 3(2), 203–208. <https://doi.org/10.32584/JIKJ.V3I2.590>
- Lovrić, R., Farčić, N., Mikšić, Š., & Včev, A. (2020). Studying during the COVID-19 pandemic: A qualitative inductive content analysis of nursing students’ perceptions and experiences. *Education Sciences*, 10(7), 1–18. <https://doi.org/10.3390/EDUCSCI10070188>
- Lyons, Z. (2020). COVID-19 and the mental well-being of Australian medical students: impact, concerns and coping strategies used. *Australasian Psychiatry*, 28(6), 649–652. <https://doi.org/10.1177/1039856220947945>
- Mheidly, N. (2020). Coping With Stress and Burnout Associated With Telecommunication and Online Learning. In *Frontiers in Public Health* (Vol. 8). <https://doi.org/10.3389/fpubh.2020.574969>
- Michele, R. De. (2020). Benefits, drawbacks and psychological impact of online lectures during quarantine due to Covid-19 pandemic. In *ACM International Conference Proceeding Series* (pp. 257–260). <https://doi.org/10.1145/3411170.3411265>
- Misirlis, N., Zwaan, M. H., & Weber, D. (2020). *International students’ loneliness, depression and stress levels in COVID-19 crisis. The role of social media and the host university*. 1–14. <http://arxiv.org/abs/2005.12806>
- Nishimura, Y. (2021). Impact of the COVID-19 Pandemic on the psychological distress of medical students in Japan: Cross-sectional survey study. In *Journal of Medical Internet Research* (Vol. 23, Issue 2). <https://doi.org/10.2196/25232>
- O’Byrne, L. (2020). Levels of stress in medical students due to COVID-19. *Journal of Medical Ethics*. <https://doi.org/10.1136/medethics-2020-107155>
- Pham, N. C., & Shi, J. R. (2020). A qualitative study on mental distress of Vietnamese students in the U.S.A. in the COVID 19 era (APAFIT) - Informit. *Asia Pacific Journal of Health Management*, 15(3), 153–158. <https://search.informit.com.au/documentSummary;dn=308860150202375;res=IELAPA>
- Sarah, K. (2021). Learning from lockdown - Assessing the positive and negative experiences, and coping strategies of researchers during the COVID-19 pandemic. *Applied Animal Behaviour Science*, 236. <https://doi.org/10.1016/j.applanim.2021.105269>
- Shafiq, S., Nahar, S., Sultana, S., & Rahman, R.-. (2021). *Children and Youth Services Review Exploring the triggering factors for mental stress of university students amid COVID-19 in Bangladesh: A perception-based study*. 120(August 2020).
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on College Students Mental Health in the US: An Interview-survey Study (Preprint). *Journal of Medical Internet Research*, 22, 1–14. <https://doi.org/10.2196/21279>
- Sun, S., Goldberg, S. B., Lin, D., Qiao, S., & Operario, D. (2020). Psychiatric symptoms, risk, and protective factors among university students in quarantine during the COVID-19 pandemic in China. *MedRxiv*, 2020.07.03.20144931. <https://doi.org/10.1101/2020.07.03.20144931>
- Sundarasan, S. (2020). Psychological impact of covid-19 and lockdown among university students in malaysia: Implications and policy recommendations. *International Journal of Environmental Research and Public Health*, 17(17), 1–13. <https://doi.org/10.3390/ijerph17176206>
- Tarquino, C., Batt, M., Tarquino, P., Lebreuilly, R., Sorsana, C., & Legrand, K. (2021). *Stress and associated factors among French university students under the COVID-19 lockdown: The results of the PIMS-CoV 19 study*. 283(November 2020), 108–114. <https://doi.org/10.1016/j.jad.2021.01.041>
- Wang, C. (2020). The Impact of COVID-19 on Anxiety in Chinese University Students. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01168>
- WHO. (2021). *WHO Coronavirus (COVID-19) Dashboard*. <https://covid19.who.int/>
- Ye, Z., Yang, X., Zeng, C., Wang, Y., Shen, Z., Li, X., & Lin, D. (2020). Resilience, Social Support, and Coping as Mediators between COVID-19-related Stressful Experiences and Acute Stress Disorder among College Students in China. *Applied Psychology: Health and Well-Being*, 12(4), 1074–1094. <https://doi.org/10.1111/aphw.12211>