IJNHS

Impact of Online Learning During Covid-19 Pandemic on The Mental Health of Nursing Students

Prasetya Andhika Johan[1], Andi Mayasari Usman[2*], Retno Widowati[2]

[1]Student in Departement of Nursing, Faculty of the Health Sciences University of National, South Jakarta, Indonesia
[2]Lecture, Faculty of the Health Sciences University of National, South Jakarta, Indonesia

Article information	Abstract
  Corresponding author: Andi Mayasari Usman Address: Universitas Nasional. Jalan Harsono RM, Ragunan, South Jakarta andimayasari@civitas.unas.ac.id 	**Introduction**: The Covid-19 pandemic has had a significant impact on daily life. The Covid-19 pandemic affects learning activities directly into online learning, so students must adapt to new habits. Ineffective online learning has the potential to cause mental health disorders. **Objective:** This study aims to determine the impact of learning during the Covid-19 pandemic on students' mental health. **Method:** This research uses a quantitative descriptive survey method with a cross-sectional research design. A total of 66 people were selected by using accidental sampling. **Result:** The result showed that Morethan half of the 49 respondents (74.2%) stated that online learning was not effective. And 35 respondents (53%) did not indicate mental disorders (Normal). **Conclusion:** There is no significant relationship between the impact of online learning and students' mental health in the Department of Nursing, Faculty of Health Science, University of National. Based on the results of the Chi-square statistical output test with a 95% of the confidence interval, it was obtained a P-Value of (0.579) > α value (0.05). **Recommendation:** Further studies are expected to be used as the basis for further research on the Impact of Online Learning on Mental Health. **Keywords:** Covid-19, Mental Health, Online Learning.

INTRODUCTION

The World Health Organization (WHO) has officially declared the coronavirus disease 2019 (Covid-19) as a pandemic in 2020. As many as 190 countries worldwide were shocked by the outbreak of the Covid-19 on a large scale. Covid-19 is an infectious disease caused by Severe Acute Respiratory Syndrome Corona Virus-2 (SARS-CoV-2). The spread of this virus is manifested by symptoms of fever, sore throat, cough, shortness of breath, and some Covid-19 patients are asymptomatic (1).

The situation changed drastically when Covid-19 hit Indonesia. Various activities that caused crowds were limited. Everyone was obliged to comply with the health protocol (Wearing masks, washing hands, keeping a distance) in the area of the temple until the implementation of the lockdown, which makes the whole community carry out activities such as work, study, and worship even have to be done at home. The circular letter of the Minister of Education and Culture No. 36962/MPK. A/HK/2020 explains that every teaching and learning activity in schools and on college campuses uses the online method to prevent the growth and spread of Covid-19 (2).

Mental health is a state of well-being in which people are aware of their abilities, can cope with normal self-pressure, work productively and usefully, and contribute to their community. WHO emphasizes that mental health "is more than the absence of a mental disorder or disability" (3,4). In a national survey study, 34.1% of participants with experience of quarantine during the Covid-19 outbreak reported having at least one psychological symptom, including anxiety, depression, insomnia, and acute stress, which was higher than those who were not quarantined (2.3%) showing that the pandemic and quarantine measures related to Covid-19 have a negative impact on mental health. Quarantine measures are associated with an increased risk of experiencing a mental health burden, especially for vulnerable groups, including

people with pre-existing mental or physical illnesses and frontline workers (5–8).

The Association of Indonesian Mental Medicine Specialists (PDSKJI) noted that of the 4010 results of self-examinations for psychological problems running for five months in Indonesia, 64.8% of them experienced psychological problems. Stress that appears during the Covid-19 pandemic in the form of worry and anxiety about the health of yourself and those closest to you, changes in sleep or eating patterns, difficulty sleeping and concentration, worsening chronic health, worsening mental health conditions, increased use of tobacco abuse, alcohol and other illegal drugs (9,10). Research conducted by Fitria & Saputra (2020) on The Impact of Online Learning on the Mental Health of Early Semester Students showed significant stress. A total of 110 respondents were students in the first semester, 43 students experienced mild stress (39.1%), 41 students experienced moderate stress (37.3%), 10 students experienced severe stress (9.1%), and 16 students did not experience stress. stress (14.5%) (11). Also, Maulana (2021) conducted research on The Psychological Impact of Online Learning during the Covid-19 Pandemic: A Case Study on Vocational Higher Education showed a significant psychological impact. Online learning in vocational education has a psychological impact, which results in 29% of students having depression levels above normal, 70% of students having anxiety levels above normal, and 46% of students having stress levels above normal (12).

OBJECTIVE

This study aims to determine the impact of learning during the Covid-19 pandemic on students' mental health and understanding of psychiatric nursing.

METHODS
Design

This research uses a quantitative descriptive survey method with a cross-sectional design. The design of this study focuses on the measurement time of the independent data variable, namely the impact of online learning, and the dependent variable, namely mental health, which is taken at one time. This study

examines whether online learning affects students' mental health.

Sample size and sampling technique

The population used in this study were 201 regular undergraduate students from the Department of Nursing, Faculty of Health Science, University of National. Samples were obtained using the accidental sampling technique for 2 weeks and got 66 respondents. The accidental sampling technique is an unintentional sampling method by taking cases or respondents who exist or are available in a place according to the research context. In the accidental sampling technique, the researcher took a sample found at that time. The inclusion criteria include active students from the 2020 and 2021 batches, also following the whole series of research. And the exclusion criteria are students who experience mental disorders, are undergoing psychiatric therapy, and also students who do not fill out the questionnaire within two weeks.

The instrument for data collection

In this study, data were obtained indirectly from respondents. Questionnaires were distributed through social media such as Whatsapp and Instagram. The first instrument uses an online learning questionnaire to calculate whether or not online learning is effective. The questionnaire uses a Likert scale and has 8 question items. The previous researcher did a statistical test with the person's then got the results of 7 valid question items with a result of 0.546 (13). The reliability test used the Chi-square test with a result of 0.012. The questionnaire was declared reliable because its value was lower than 0.05 (5%) (p 0.012 < p 0.05).

Another questionnaire is the Self Reporting Questionnaire (SRQ) – 20, developed by WHO. This instrument contains 20 question items with a Gutman scale. This question has five options: strongly agree, agree, neutral, disagree, strongly disagree. WHO developed the Self Reporting Questionnaire (SRQ)-20, and this instrument has been used in several countries by WHO (14).

Data collection process

This research was conducted at the Departement of Nursing, Faculty of Health Sciences, University of National. For 2 weeks from 17 to November 28th 2021.

Data analysis

The type of statistics used in this research is a descriptive survey to collect and present data to provide helpful information. Classification into descriptive surveys is carried out based on the activities carried out. The variables measured using descriptive surveys are the impact of online learning and the variable of mental health.

The data obtained were analyzed using bivariate analysis. This study aims to determine the effect of learning during the Covid-19 pandemic on students' mental health and understanding of psychiatric nursing. The data analysis process in this study uses the Chi-square test with a sig value is below 0.05, then H0 is rejected, and if the sig value above 0.05, then H0 is accepted.

Ethical consideration

The Departement has approved this research of Nursing, Faculty of Health Sciences, the University of National with No: 884/D/SP/FIKES/XI/2021

The researchers must understand the principles of research ethics. In general, ethical principles in research or data collection can be divided into three parts: the principle of benefit (free from suffering, exploitation, and risk). The principle of respecting the subject's rights (the right to participate or not to participate, being a respondent, to obtain guarantees and informed consent), and the principle of justice (right to fair treatment and right to confidentiality). Before data collection, the researcher provided informed consent in google forms containing a statement of consent from the students to become respondents in this study.

RESULTS

The characteristics of the respondents seen in this study were gender, age, and batch.

(45%), respondents 19 years were 24 respondents (36%), respondents 20 were 9 respondents (14%), and respondents 21 years were 1 respondent (2%). The distribution of respondents is based on current batch 2020 in 22 respondents (33.3%) and batch 2021 in 44 respondents (66.7%).

Table 1 Sociodemographic

Variables	Frequency (N)	Percentage (%)
Gender		
Male	3	4.5
Female	63	95.5
Age		
17 Years Old	2	3
18 Years Old	30	45
19 Years Old	24	36
20 Years Old	9	14
21 Years Old	1	2
Batch		
2020	22	33.3
2021	44	66.7
Total	**66**	**100**

Table 2 Distribution of the impact of online learning

Impact of Online Learning	Frequency (N)	Percentage (%)
Effective	17	25.8
Ineffective	49	74.2
Total	**66**	**100**

The table above shows that 17 respondents (25.8%) have an Effective impact on online learning. And 49 respondents (74.2%) have an Ineffective effect of online learning.

Table 3 Distribution of Mental Health

Mental Health	Frequency (N)	Percentage (%)
Normal	35	53
Mental Disorders	31	47
Total	**66**	**100**

The table above shows that 35 respondents (53%) were Normal. And 31 respondents (47%) were indications have mental disorders.

According to gender, the gender distribution of respondents is from 66 respondents with the highest percentage by gender were 63 respondents (95.5%) were female, and 3 respondents (4.5%) were male. The respondents to age, respondents 17 years were 2 respondents (3%), respondents 18 years were 30 respondents

Table 4 The relationship between the impact of online

Impact of Online Learning	Mental Health						P-Value
	Normal		Mental Disorders		Total		
	N	%	N	%	N	%	
Effective	10	15.2	7	10.6	17	25.8	
Ineffective	25	37.9	24	36.4	49	74.2	0.579
Total	35	53	31	47	66	100	

Chi-square test p-Value = 0.579 (> 0.05)

Based on the table above, it can be seen that from 66 respondents, there were respondents who felt the impact of online learning in the practical category who had normal mental health as many as 10 respondents (15.2%) and 7 respondents (10.6%) indicated mental disorders. Meanwhile, who felt the impact of online learning in the ineffective category who had normal mental health, 25 respondents (37.9%) and 24 respondents (36.4%) indicated mental disorders. So it can be concluded that respondents who feel the impact of online learning in the ineffective category do not affect mental health.

Based on the result of the Chi-square statistical output test with a 95% confidence interval, it was obtained a P-value of (0.579) > a value (0.05). Thus it can be interpreted that there is no relationship between The Impact of Online Learning and Mental Health in The Departement of Nursing, Faculty of Health Science, University of National 2021.

DISCUSSION

The results of a study found that from 66 respondents, there were respondents who felt the impact of online learning in the ineffective category as many as 25 respondents (37.9%) who did not indicate symptoms of mental disorders (normal) and 24 respondents (36.4%) who indicated mental health disorders.

While the respondents who felt the impact of online learning in the effective category were 10 (15.2%), who did not exhibit symptoms of mental disorders (normal), and 7 respondents (10.6%) who indicated mental health disorders. So it can be concluded that respondents who feel the impact of online learning in the ineffective category can affect mental health more efficiently than respondents who feel the effects of online learning in the effective category.

Based on this research, it was found that several other factors outside the research variables could influence the impact of online learning on mental health, including the adaptation factor of each individual and the respondent's ability to manage stress and cope effectively.

This study indicates that the majority of research subjects consider that online learning is not effective but has no significant effect on students' mental health. This result is in line with a study conducted by Wahidah et al. (15) related to the influence of the number of lecture assignments on students' mental health at the University of Jember. This type of research is a descriptive study using a cross-sectional design. Sampling was carried out using inferential statistical methods to obtain a total sample of 101 respondents. Data was collected using a questionnaire in the form of google forms. This study aimed to determine the effect of the number of lecture assignments

on the mental health of students at the University of Jember. From the study results, it was found that most of the students (61.9%) stated that they had difficulty in doing their coursework. Then as many as (27.6%) of the respondents stated that it might be difficult to do the task. Meanwhile (10.5%) of the respondents stated that they had no difficulty doing the task. Based on the test results, the value table is **F**calculated 0.646 with an F-table 3.09. So the value **F**calculated **< F**table or 0.646 < 3.09. It can be concluded that the variable number of assignments (X1) and the task difficulty scale (X2) simultaneously have no significant effect on the mental health of Jember University students.

Based on the theory of health, several factors can affect a person's mental changes including 1) Adaptation; 2) Stress management; 3) Emotional management; 4) Effective Coping

Based on the results of research conducted by Sari et al. (2020) on The Effect of Stress Management and Managing Emotions on Students' Anxiety Levels in the New Normal Era (16), stress management and managing emotions have a significant effect on student anxiety in the new normal era. The ability to manage stress and emotions well can improve self-adaptation with problems and demands that arise and assess, understand feelings objectively, and express them. This is what makes a person have an effective coping so that it has a positive impact on a person's mental changes.

Acknowledgment

REFERENCES

(1) World Health Organization (WHO). Corona Virus Disease (COVID-19) pandemic [Internet]. 2020 [cited 2021 Jul 2]. Available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019?gclid=Cj0KCQjwxJqHBhC4ARIsAChq4asSQCqfolaYQUTwF5RMYJl78oqADXwk-jBTQhR33luV_LlYH4Cnfq0aAgZ8EALw_wcB

(2) Kemendikbud Republik Indonesia. Mendikbud: Pembelajaran secara Daring dan Bekerja dari Rumah untuk Mencegah Penyebaran Covid-19 [Internet]. 2020 [cited 2021 Jul 2]. Available from: https://www.kemdikbud.go.id/main/blog/2020/03/se-mendikbud-pembelajaran-secara-daring-dan-bekerja-dari-rumah-untuk-mencegah-penyebaran-covid19

(3) World Health Organization (WHO). Mental health: strengthening our response [Internet]. 2018 [cited 2021 July 2nd]. Available from: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

(4) Dewi KS. Buku ajar kesehatan mental [Internet]. UPT UNDIP Press Semarang. 2012. 143 p. Available from: http://eprints.undip.ac.id/38840/1/KESEHATAN_MENTAL.pdf

(5) Wang Y, Shi L, Que J, Lu Q, Liu L, Lu Z, et al. The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic. Mol Psychiatry [Internet]. 2021; Available from: http://dx.doi.org/10.1038/s41380-021-01019-y

(6) Harahap ACP, Harahap DP, Harahap SR. Analisis Tingkat Stres Akademik Pada Mahasiswa Selama Pembelajaran Jarak Jauh Dimasa Covid-19. Biblio Couns J Kaji Konseling dan Pendidik. 2020;3(1):10–4.

(7) Fakhriyani DV. Kesehatan Mental [Internet]. Duta Media; 2019. Available from: https://www.researchgate.net/profile/Diana-Fakhriyani/publication/348819060_Kesehatan_Mental/links/60591b56458515e834643f66/Kesehatan-Mental.pdf

(8) Pereira-Sanchez V, Adiukwu F, El Hayek S, Bytyçi DG, Gonzalez-Diaz JM, Kundadak GK, et al. COVID-19 effect on mental health: patients and workforce. The Lancet Psychiatry [Internet]. 2020;7(6):e29–30. Available from: http://dx.doi.org/10.1016/S2215-

0366(20)30153-X

(9) PDSKJI. 5 Bulan Pandemi Covid-19 di Indonesia [Internet]. Indonesian Psychiatric Association. 2020 [cited 2021 Jul 1]. Available from: http://pdskji.org/home

(10) Maia BR, Dias PC. Anxiety, depression, and stress in university students: The impact of COVID-19. Estud Psicol. 2020;37:1–8.

(11) Fitria PA, Saputra DY. Dampak Pembelajaran Daring Terhadap Kesehatan Mental Mahasiswa Semester Awal. J Ris Kesehat Nas. 2020;4(2):60–6.

(12) Maulana HA. Psychological Impact of Online Learning during the COVID-19 Pandemic: A Case Study on Vocational Higher Education. Indones J Learn Educ Couns. 2021;3(2):130–9.

(13) Jannah M. Pengaruh Pembelajaran Via Online Selama Pandemi Covid-19 Terhadap Tingkat Stress Mahasiswa Tingkat Akhir Fakultas Kedokteran Universitas Muhammadiyah Makassar. UNISMUH [Internet]. 2021; Available from: https://digilibadmin.unismuh.ac.id/upload/13256-Full_Text.pdf

(14) Fauziyah. Gambaran Masalah Kesehatan Jiwa Mahasiswi Yang Tinggal Di Pondok Pesantren Al Husna Sumbersari Jember. Skripsi. 2018;1–49.

(15) Wahidah L, Naufal FHA, Deky NC, Permatasari A, ... Pengaruh Jumlah Tugas Kuliah Tehadap Kesehatan Mental Mahasiswa Universitas Jember. ResearchgateNet [Internet]. 2021;(June). Available from: https://www.researchgate.net/profile/Layyinatuzzahrah-Wahidah/publication/352553271_PENGARUH_JUMLAH_TUGAS_KULIAH_TEHADAP_KESEHATAN_MENTAL_MAHASISWA_UNIVERSITAS_JEMBER/links/60cf5b33a6fdcc01d4880529/PENGARUH-JUMLAH-TUGAS-KULIAH-TEHADAP-KESEHATAN-MENTAL-MAH

(16) Sari P, Bulantika SZ, Utami FP, Kholidin FI. Pengaruh Manajemen Stress dan Kelola Emosi Terhadap Tingkat Kecemasan Siswa di Masa New Normal. Bull Couns Psychother. 2020;2(2):62–7.