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Description Study of Student Nursing Perceptions on Online Learning During the Covid-19 Pandemic

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ABSTRACT The Covid-19 pandemic that is currently engulfing the world, including Indonesia, has changed the way people live, including education. The online learning process is one of the efforts made by the government in controlling the spread of Covid 19 among students. This study was conducted to explain students' perceptions of online learning, both aspects of the teaching and learning process, aspects of lecturers and infrastructure. The research sample was students majoring in nursing at the Sutomo Surabaya campus for the 2020/2021 academic year, totaling 510 people. Data was obtained online through Google Form, using a questionnaire, data were analyzed descriptively. The results showed that students' perceptions of online learning were in a good category 37.8%, 61.4% sufficient, 0.8% less. The results of the research on student perceptions about online learning from the aspect of the teaching and learning process are in good category 22.35%, 76.87% sufficient, 0.78% less. Students' perceptions of online learning from the lecturer's perspective, good category 58.43%, 41.57% enough. Student perceptions of online learning from the aspect of infrastructure, good category 70.20%, 29.02% enough, 0.78% less. It is recommended to students improve their perception of online learning so that learning goals can be achieved to the maximum.

INDEX TERMS student's perception, online learning

I. INTRODUCTION

Since its inception, the COVID-19 pandemic has had an impact on all aspects of life, including the world of education. Various efforts have been made by the government to minimize the transmission of COVID-19, both in the community and among students who are in the campus environment. The policy implemented in the world of education is to implement an online learning process (on the network) or distance learning to prevent the spread of the virus that causes COVID-19. This policy was implemented through the Ministry of Education and Culture by issuing Circular Letter Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Covid-19. The Circular explains that the learning process is carried out at home through online/distance learning to provide meaningful learning experiences for students [1]. Online learning is one form of using the internet that can increase the role of students in the learning process[2]. Another definition says that online learning is a distance education system with a set of teaching methods where there are teaching activities that are carried out separately from learning activities[3]. Online learning creates various perceptions among students. Several studies have found that many students find it difficult to learn without direct guidance from the teacher. Pavlovic et al stated that students have a perception that online learning is something that is boring and burdensome for them [2]. On the other hand, based on Lin et al [3], it is stated that students' abilities and learning outcomes can be increased through online learning [4] Other research suggests that online learning methods have a positive impact which makes students get better grades but the negative impact is a lack of understanding of the material, internet network disturbances and stress on students [5]. Perception is an individual's process of interpreting, organizing, and giving meaning to the stimulus that comes from the environment where the individual is located which is the result of the learning process and experience [6]. The Sutomo campus nursing

department is one of the departments under the Health Polytechnic of the Surabaya Ministry of Health which has been carrying out online learning since March 2020. This study aims to explain the perceptions of Sutomo campus nursing students about online learning. Perceptions of students studied include student perceptions of aspects of the teaching and learning process, student perceptions of lecturer capacity aspects, and student perceptions of infrastructure aspects. The difference between this research and previous research is that the target of the research is nursing students whose graduates are expected to provide professional nursing care services. Related to this, students need to be equipped with nursing skills that in their implementation require various strategies and infrastructure support in the implementation of online learning so that their learning goals are achieved optimally.

II. METHOD

The research method uses a descriptive approach that aims to get a realistic and objective picture of a certain condition that is happening in community groups[7]. This study aims to get an overview of students' perceptions of online learning. The samples used were students majoring in nursing at the Sutomo Surabaya campus, totaling 510 people. Method of collecting data by filling out questionnaires by research respondents online through Google Form. The questionnaire used in this study was compiled by researchers and before use first tested validity and reliability. Descriptive data analysis includes data on students' perception of online learning from aspects of the teaching and learning process, from aspects of lecturer capacity and from infrastructure aspects.

III. RESULT
A. CHARACTERISTICS OF RESEARCH SUBJECTS

The research subjects were students majoring in nursing at Poltekkes Kemenkes Surabaya Sutomo Campus in the even semester of the D3 Nursing study program, the Bachelor of Applied Nursing study program, the Nursing Profession study program totaling 458 people and the odd semester students of the Nursing Profession Study Program totaling 52 people, the total number of research subjects was 510 people. Research subjects have undergone an online learning process from January to June 2021.

TABLE 1
Description of The Characteristics of Students of The Department of Nursing Sutomo Poltekkes Kemenkes Surabaya Period January-June 2021

Characteristics	F	%	Amount F	Amount %
Gender				
Male	74	14,5	510	100
Female	436	85,5		
Age				
18-20 years	258	50,6		
> 20 years	252	49,4	510	100
Domicile				
Surabaya	150	29,4		
East Java Outside Surabaya	336	65,9	510	100
Outside East Java	24	4,7		
Courses				
D3 Sutomo Nursing	276	54,1	510	
Bachelor of Applied Nursing	159	31,2		100
Ners Profession	75	14,7		
Semester				
Semester 1 (Ners Profession	52	10,2	510	100
Semester 2	208	40,8		
Semester 4	128	25,1		
Semester 6	84	16,5		
Semester 8	38	7,5		

B. STUDENT PERCEPTIONS ABOUT ONLINE LEARNING

Data on student perceptions of online learning was obtained by filling out a questionnaire sent via Google Form. Student perceptions about online learning consist of general perceptions about online learning (TABLE 2), perceptions about online learning based on gender, age, domicile, and student study program (TABLE 3-TABLE 6). In addition, the results of the study also show students' perceptions of online learning from aspects of the learning process, aspects of lecturers, and aspects of infrastructure (TABLE 7).

TABEL 2
Description of Student Perception for Online Learning of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya Period January-June 2021

Variable Characteristics	Category Well	Category Enough	Category Less	Total F	Total %
Student perception of online learning	193 (37,8%)	313 (61,4%)	4 (0,8%)	510	100

TABEL 3
Description of Student Perception For Online Learning By Gender Of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya Period January-June 2021

Sex	Category Well	Category Enough	Category Less	Total F	Total %
Male	31 (41,89%)	43 (58,11%)	0	74	100
Female	162 (37,16%)	270 (61,92%)	4 (0,92%)	436	100
	193 (37,8%)	313 (61,4%)	4 (0,8%)	510	100

TABEL 4
Description of student perception for online learning by age of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya period January-June 2021

Age	Category Well	Category Enough	Category Less	Total F	Total %
18-20 years	104 (40,31%)	150 (58,14%)	4 (1,55%)	258	100
> 20 years	89 (35,32%)	163 (64,68%)	0	252	100
	193 (37,8%)	313 (61,4%)	4 (0,8%)	510	100

TABEL 5
Description of student perception for online learning based on domicile of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya period January-June 2021

Domicile	Category			Total	
	Well	Enough	Less	F	%
Surabaya	59 (39,34%)	89 (59,33%)	2 (1,33%)	150	100
East Java Outside Surabaya	125 (37,20%)	209 (62,20%)	2 (0,60%)	336	100
Outside East Java	9 (37,5%)	15 (62,%)	0	24	100
	193 (37,8%)	313 (61,4%)	4 (0,8%)	510	100

TABEL 6
Description of student perception for online learning based on study program of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya period January-June 2021

Study Program	Category			Total	
	Well	Enough	Less	F	%
D3 Sutomo Nursing	100 (36,23%)	174 (63,04%)	2 (0,73%)	276	100
Bachelor of Applied Nursing	61 (38,36%)	96 (60,38%)	2 (1,26%)	159	100
Ners Profession	32 (42,67%)	43 (57,33%)	0	75	100
	193 (37,8%)	313 (61,4%)	4 (0,8%)	510	100

TABEL 7
Description of student perceptions of online learning from the aspect of the teaching and learning process, lecturer, and infrastructure of Sutomo Poltekkes Campus Sutomo Poltekkes Kemenkes Surabaya period January-June 2021

Variable Characteristics	Category			Total	
	Well	Enough	Less	F	%
Student perception of online learning from the aspect of the teaching and learning process	114 (22,35%)	392 (76,87%)	4 (0,78%)	510	100
Student perception of online learning from the aspect of lecturer	298 (58,43%)	212 (41,57%)	0	510	100
Student perception of online learning from the aspect of infrastructure	358 (70,20%)	148 (29,02%)	4 (0,78%)	510	100

IV. DISCUSSION

TABLE 2 shows that most students have enough perception about online learning, but there is also a small percentage who have less perception. Previous similar studies have shown that online learning is indeed effective in motivating students to study hard. Other research suggests several

advantages of online learning, among others, in its implementation, it is more efficient, practical, and flexible. In addition, the teacher easily gives grades so that students are more interested in doing assignments. Another advantage is that students are accompanied by their parents in learning and teachers and students gain new experiences. In addition to having advantages, online learning also has several disadvantages, including the lack of student involvement in the teaching and learning process. The results showed that only 50% of students were very actively involved, 33% were actively involved and 17% were less active in online learning[8]. Meanwhile, it was also said that, apart from having a stressful impact on students, the online learning process also had an impact on real physical fatigue. Many students are willing to stay up late at night to complete their assignments on time [9]. The results of this study did not show any significant differences in perceptions, between male and female students, between age groups, student domicile and study program origin. The same results are also shown in research on perceptions of bullying behavior in terms of gender where there is no difference in perception between men and women [10]. Other research on perception shows different results from this study where there is a significant relationship between gender and the perception of health workers on the Covid 19 vaccine [11]. The results of this study differ from the theory put forward by several experts, including Rakhmat et al which suggests that the factors that influence perception consist of functional factors, namely individual factors, including: age, gender, individual needs [12]. Likewise, Muchlas and Arifin suggests that gender can affect a person in interpreting the perception of an object or stimulus he sees [13]. The results of this study are also different from the theory proposed by Aryanti and Wijayaningsih KS which says that gender is one of the functional factors that influence perception [14]. Meanwhile, in a study of 258 new students at Polytechnic University of the Philippines, respondents revealed that distance learning is very good and important even though sometimes it has difficulty in accessing facilities and infrastructure for online learning [15].

TABLE 7 shows that students' perceptions of online learning ofrom the aspect of the learning process showed that almost all student had moderate perceptions of online learning (76.87%). The results of this study are somewhat different from the research conducted by Irawan S and Listyaningsih where the students' perceptions of online learning in the teaching and learning aspects are mostly in the medium category[16]. Research with the same theme but based on the quality aspect of academic interaction shows different results. This is different from this study where all respondents have high perception of the quality of online academic interactions [17]. The results of this study are also different from the research of Prasetio T and Hariyani R which concluded that from the aspect of teaching methodology students' perceptions were in the low category. The research suggests the need for face-to-face learning

because it requires mentoring and explanation of lecture material directly from the lecturer [18]. It is said that perception is a process related to receiving messages or information into the human brain, through human perception, and so on forming interactions with the environment. The interaction is carried out through the senses of sight, hearing, touch, taste, and smell. Several factors that influence perception are internal factors, including interest, attention, mood, and external factors, including the uniqueness and contrast of the stimulus, the intensity and strength of the stimulus, motion or movement[18]. Another study found that respondents expected most online learning methods to continue to be used during face-to-face learning. Respondents also think that online learning methods have a positive impact even though the overall effectiveness of the online learning experience is lower than face-to-face learning [19]. It is said that perception is a process that relates to the acceptance of messages or information into the human brain, through human perception, and so on forming interactions with its environment. The interaction is done through the senses of vision, listener, touch, taste, and smell. Some factors that affect perception, namely internal factors, including interest, attention, mood, and external factors, among others, the uniqueness and contrast of the stimulus, the intensity and strength of the stimulus, motion, or movement [20]. The existence of differences in student perceptions of online learning from the learning aspect is very dependent on the interests, attention, mood of students as well as the intensity, strength of the stimulus, and movement in the online learning process.

The results of the study as seen in TABLE 7 showed that students' perception of online learning from the lecturer aspect shows that most students have a good perception of online learning (58.43%). The results of this study are not different from previous studies which concluded as many as 60% of students showed a good perception of online learning from the aspect of lecturers [16]. Likewise, the research conducted by Maulana and Hamidi showed results that were in line with the results of this study where students' perceptions of online learning from the aspect of lecturers' capabilities showed 74.6% of students showed positive perceptions [21]. The ability of lecturers in online learning includes the ability to understand the characteristics of students, the ability to update online learning materials and technology, the ability to give assignments to students, and the ability to communicate and innovate. Research shows that lecturers get some positive experiences in online learning, including gaining new experiences in teaching techniques, becoming more creative and innovative. In addition to positive experiences, lecturers also experienced some negative experiences in online learning, among others, could not control the presence and activeness of students [22]. In order for online learning to take place properly and effectively, lecturers are required to have several skills, namely: communication skills, having empathy for students, increasing patience, being experts in the courses delivered,

being able to do time management, making lectures more exciting, understanding the use of Learning Management System and Woo said that lecturers need efforts to implement distance learning strategies and students need support/support from lecturers in order to understand the material well. For this reason, efforts are needed to make learning more interactive by implementing several learning methods that are more student-centred [24]. If this is carried out properly by the lecturers, the implementation of learning including online learning will take place well and smoothly so that it creates a positive perception for students.

Likewise, students' perception of online learning from the aspect of facilities and infrastructure, in TABLE 7 of research results show that most students have good perceptions about online learning (70.20%) and there are 4 students (0.78%) who have less perceptions about online learning. The results of this study are different from previous studies where 50% of students have a moderate perception and only 38% of students have a good perception of online learning [16]. Similar results were obtained in another study which showed that there were 72.7% of students had a positive perception of online learning from the aspect of facilities and infrastructure [24]. What is meant by online learning infrastructure in this study are facilities and infrastructure that support students in online learning? These infrastructure facilities include ownership of online learning facilities, including computers, laptops/android cellphones, and also the achievement of internet network access in online learning in the form of internet data packages and internet network stability. In a survey, it was found that the challenges of students in online learning were found that 35% experienced internet access that was not smooth and 7% did not have a device or inadequate electronic device. The Ministry of Women's Empowerment and Child Protection in its research through an online survey of students aged 14-17 years amounted to 717 people from 29 provinces. The results of the research show that 58% of students do not like to carry out learning from home programs for various reason including students experiencing limitations in technology as a means of supporting learning from home programs in the form of internet facilities, devices, and electronic books[25]. The success of online learning cannot be separated from the support of facilities and infrastructure. It is said that online learning is learning that takes place partially or completely using the internet. In order for the implementation to run properly and effectively, of course, it needs to be supported by an adequate internet network. One of the obstacles encountered in the implementation of online learning is the uneven distribution of internet access throughout Indonesia [26]. In order to function properly, online learning facilities and infrastructure need to get support from various parties. It said that administrative support from policymakers in educational institutions is needed to improve the quality of online learning [27]. Another thing that supports online learning from the aspect of facilities and infrastructure is the support from the environment/family. Family support is attitudes, actions, family acceptance of family members in

the form of information support, assessment support, instrumental support, and emotional support. Information support provided by families in online learning includes reminding family members and motivating family members in online learning. In addition, families also provide instrumental support in the form of providing funds and a conducive environment for online learning. Another support provided is assessment support in the form of praise and rewards to family members who have carried out online learning [28]. Meanwhile, different results were found in other studies where some parents gave different assessments of online learning because they spent more on purchasing internet quota to support the learning process [29]. The limitation of this study is to identify the perception of nursing majors to online learning as a whole for all courses so that students' perceptions of online learning for each course cannot be identified. It is expected to conduct research on the perception of online learning for certain courses so that the results obtained are more specific [30].

V. CONCLUSION

Students' perceptions of online learning from the aspect of the teaching and learning process are almost entirely in the sufficient category (76.87%), from the lecturer aspect, most are in a good category (58.43%), and from the infrastructure aspect, most are in good category (70.20%). It is recommended to conduct research on the perception of online learning for certain courses so that the results obtained are more specific.

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