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## **A Qualitative Research on Students' Perspective on Distance Nursing Education**

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### **Abstract**

This study was conducted to determine the problems related to distance education in applied education such as nursing. The population of the research consisted of 30 students studying at a state university nursing department. 63.3% of the students who participated in the study stated the distance education were insufficient. 70% of the students stated that the videos are not sufficient/do not reflect the reality. 80% of the students stated that they had limited opportunities in internet and computer access, 83.3% of the students stated that the exams and homework given do not reflect the actual evaluation, instead, the application parts of the lessons should be repeated when face-to-face education is started. In order to reduce the identified problems related to distance education, universities should constantly update their distance education infrastructure systems for theory courses and practical courses should be repeated in an accelerated manner in the following term.

**Keywords:** Distance Education, Nursing, Nursing Education, Nursing Student.

### **INTRODUCTION**

Order to reduce the spread of the coronavirus, which started in Wuhan, China in 2019 and spread all over the world with its high contagion feature, people's gathering and social mobility were restricted in many areas such as education. Workplaces and schools have been closed in order to reduce social mobility and implement social distance rules (TÜBA, 2020). For this purpose, distance education has been started. In our country, education was suspended on March 12, 2020, and it was announced on March 23, 2020 that face-to-face education could not be given (YÖK, 2022). Because the impact of this situation on nursing students whose application areas are clinical will be different (Brooks et al., 2020; Owusu-Fordjour, Koomson, & Hanson, 2020; Sahu, 2020). In this complex period, schools providing nursing education will plan within their own facilities and infrastructures. While some of these schools are planning to transfer their practices to the following years, some of them continued the theoretical and practical education of nursing with distance education. Schools providing distance education gave this education online / synchronous, online / asynchronous or hybrid. Clinical applications have been replaced by virtual simulation

applications within the possibilities of the institutions. Educational institutions are trying to continue their nursing education in a unique structure by taking into account many different features such as their existing technological infrastructure, the quality and quantity of the workforce, and past experiences. However, carrying out different education plans in nursing brings inequalities in education. Brought in. With the reflection of the uncertainties in the pandemic process on education, the situation of institutions to develop their distance education infrastructure has also changed (İlaslan, Demiray 2021; Domenico, Pullano, Coletti, Hens, & Colizza, 2020; Viner et al., 2020; Vatan, Avdal, Yağcan, Şanlı 2020; Mucuk, Ceyhan, Kartın 2021). Although it is difficult to plan in the face of the uncertainty of the future in panic and crisis situations such as pandemics, educators also have social obligations such as long-term thinking. For this reason, nurse educators need to think carefully about the graduation qualifications of students during the pandemic process, and the efficiency and adequacy of clinical practice hours in this process. Nurse educators need to give importance to the experience and opinions of students in this planning and determine their strategies accordingly (Cervera-Gasch, González-Chordá, Mena-Tudela 2020). Because in distance education, students are individuals responsible for their own learning process. Educators are people who facilitate and guide this learning. In this new education system, the roles and responsibilities of both students and educators should be reviewed and the learning process should be designed according to these characteristics. In this context, studies should be carried out to recognize the individual differences of nurse learners, to determine their learning characteristics and to reflect this on the learning process (Eby, 2013). It is important and necessary to determine the problems related to distance education, especially in applied education such as nursing, and to produce solutions for these problems. For this reason, this research was conducted to determine the views and thoughts of students who received nursing education during the pandemic period about distance education.

## MATERIALS AND METHODS

**Type of the Study:** This is a qualitative research conducted with semi-structured interview method in order to determine the problems experienced by the healthcare professionals who are in the field during the COVID-19 pandemic process, and the problems experienced by the students who take the nursing vocational courses, which is a practical training, through distance education and to find solutions for these problems.

**Population and Sample of the Research:** The population of the research consists of 380 students studying in the nursing department of the faculty of health sciences of a state university. The easily accessible sampling method, which is a purposeful sampling method, was used in the selection of the sample (Yıldırım & Şimşek, 2011). Due to the transition to distance education in the pandemic, easy-to-reach sampling was used because it was chosen from people who could be reached practically and quickly. Students who received face-to-face nursing education before the pandemic were included in the study so that students could have the opportunity to compare. For this, 3rd and 4th grade nursing students were included in the study. The number of participants was determined according to data saturation and data were collected from 32 students on a voluntary basis. Two of the participants were excluded from the study because they did not have comments, and the analysis of the data in the study was carried out with 30 participants. 50% (15) of the students participating in the research are 3rd grade students and 50% (15) are 4th grade students. 80% (n=24) of the participants are female and 20% (n=6) are male students. The ages of the students range from 20 to 24, with an average age of 21.8. Ethics Committee approval was obtained

from the relevant institution, dated 03.02.2021 and numbered 2100003172, before starting the research. Before the focus group interview, the students who participated in the research were informed about the research by the researcher, it was explained that the data of the interview and their personal identity information would be kept confidential, the reason for the audio recording was explained, and their informed consent was obtained.

**Data Collection Tool:** In order to determine the problems of nursing students related to distance education during the COVID-19 pandemic process and solution suggestions for these problems, 3 questions containing the demographic characteristics of the participants, which were created by the researcher by using the literature, and 8 open-ended questions containing the problems they experienced and solution suggestions were asked.

Demographic questions:

1. Age,
2. Gender,
3. Grade level

Open-ended questions:

1. Pandemic process?
2. What are the problems you encounter in the distance education process?
3. What are your opinions and suggestions about the teaching process in distance education?
4. What are the teaching methods and techniques you see in distance education?
5. What are the teaching materials used by teachers in distance education?
6. What are your views on the space, time and teaching programs they use during the realization of distance education?
7. Pandemic period?
8. Pandemic What are the effects of the nursing process on the anxiety and satisfaction of the nursing profession and professional development?

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**Implementation of the Research:** Semi-structured interview technique was used as the data collection method in the research. Semi-structured interview technique provides more systematic and comparable information by maintaining a pre-prepared interview protocol due to its certain level of standardization and flexibility (Turnuklu 2000). In the research, this interview technique was used in order to better present the experiences of the participants and to benefit from the flexibility. Research data were obtained between March 1 and April 30, 2021. The interviews were made via telephone due to the epidemic measures, and the interviews were recorded with a voice recorder in order to prevent data loss.

### Analysis of Data

Content analysis method was used to analyze the collected data after recording the phone calls due to pandemic restrictions. Coding the data, determining the themes of the coded data, organizing the codes and themes, defining and interpreting the findings were done with content analysis. Voice recordings and written notes were analyzed and the names of the participants were not specified, paying attention to the confidentiality of the participants, the "K" code was used for the participants and the numbers were numbered as K1, K2, K3... and the data were expressed in this way.

## RESULTS

In this section, the findings regarding the results of the content analysis of the answers to the open-ended questions prepared by the researcher are presented. The findings were also supported by the sample statements taken from the participants.

**Table 1. Students' views on the teaching technique and material used in distance education**

subject area	Themes	Codes	f
teaching technique	Positive	Sufficient	4
		There is a chance to repeat the lesson whenever we want.	3
		The lack of a crowded classroom environment, as if you were having a one-on-one lesson with the teacher made learning easier.	3
	Negative	Teaching technique is insufficient in applied courses	15
		I can't understand nursing practice without doing it myself	10
		More theoretical courses are conducted.	6
		I could not learn the applications in the real environment	4
		In lectures in the form of lectures, I could not follow the lecture most of the time, I was very distracted.	3
	teaching material	Positive	The materials used made it easier for me to learn
Negative		Videos related to applications are insufficient and do not reflect reality	21

In Table 1, students' views on the teaching technique and material used in distance education are grouped under two main themes, positive and negative, in the subject areas of teaching technique and teaching material. When the opinions about the teaching technique are examined, it is stated that the teaching technique in the positive theme is sufficient (f=4), they have the opportunity to repeat the lesson whenever they want (f=3), and that it is not in crowded classrooms, and being like one-on-one with the teacher facilitates learning (f=3). Is located. In the negative theme of the teaching technique of the students, respectively, the teaching technique was inadequate in the applied courses (f=15), they could not understand the nursing practices without doing it themselves (f=10), the lessons were mostly carried out theoretically (f=6), and they could not learn the applications in the real environment (f). =4) and in lectures in the form of lectures, they stated that they could not follow the lesson most of the time, and I was very distracted. 50% of the students (15) emphasized that the teaching technique, especially with applied courses, was insufficient.

When the students' views on the teaching materials used in distance education are examined, 70% (21) of the students stated that the application videos given to the students in distance education are not sufficient/do not reflect the truth.

Sample expressions of students' teaching technique and material usage used in distance education;

*K4. In face-to-face education, there were times when I could not listen to the lesson, I could not ask the teacher to repeat the lesson. But I had this chance in distance education. I had the opportunity to watch/listen to the recordings of the lecture over and over. In this respect, distance education has been advantageous for me when there are subjects that I do not understand.*

*K5. There is no problem in the theoretical parts of the course, but I think we are inadequate in practice. Because in distance education, we have to graduate without gaining experience without even touching an injector. This is very sad. I would like to do hands-on lessons face to face. It is very upsetting to have to experience many applications on real patients when I run them for the first time.*

*K16. It is very difficult to understand nursing skills in distance education. Instructors explain using videos in the lessons, but it seems very easy when they do it. Watching is not enough unless I experience it myself.*

*K24. The videos in the practice lessons were generally videos shot in a laboratory environment. Videos shot on real patients and in real hospital settings could have made it easier for me to understand. I think that the videos made on the model do not reflect the truth.*

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**Table 2. Students' views on the problems experienced in distance education**

subject area	Themes	Codes	f
technical problems	Positive	I did not experience any technical problems	5
	Negative	I had a hard time getting a computer.	20
		I had a problem with internet access	24
		I had a problem in online exams due to technical problem	14
familial and social problems	Positive	I didn't have any problems	10
	Negative	The home environment was not suitable for me to follow the lessons.	15
		My family put a lot of pressure on the lessons.	10

In Table 2, students' views on the problems experienced in distance education are grouped under two main themes: technical problems and family and social problems. 16.6% (5) of the students stated that they did not experience any technical problems in distance education, and 33.3% (10) stated that they did not experience any family or social problems. Considering the technical problems experienced by the students, they stated that they had the most problems with internet

access (f=24), they had difficulty in obtaining a computer (f=20), and they had technical problems during online exams (f=14).

Sample statements about the problems experienced by students in distance education;

*K3. I live in the village. There is no internet in our village. The city center is also very far away. I tried to go to the city center for hours for each lesson, but there were days when I couldn't go. I had to follow the lectures mostly from the recording. Since I do not have internet access, my course success grade has dropped a lot this year.*

*K11. We did not have a computer in our house. I borrowed a computer from a friend of our neighbor and tried to follow the lessons, but I couldn't always get it. For this reason, I fell behind my friends and I felt very bad. I thought of freezing the school until the pandemic process is over.*

*K15. I guess the exams were a backlog. Therefore, there was a lot of confusion in the questions. By the time I passed the question, my time was up. The time anxiety in each exam made it difficult for me to understand the questions.*

*K29. It was very difficult for me to continue classes with the family during the pandemic process. We are a large family, I had a hard time keeping quiet during class hours. Most of the time I couldn't. In addition, my family had the opportunity to closely monitor which course they took and which courses they did not take. Even though the lessons were sometimes delayed due to technical problems, I had problems because my family thought I didn't attend the class. The pressure of my family reduced my motivation a lot, so my success score also dropped.*

**Table 3. Opinions and suggestions of students regarding distance nursing education and training**

subject area	Themes	Codes	f
Distance Learning	Positive	I had the opportunity to listen to the lectures over and over again	16
		The absence of a crowded classroom environment made it easier for me to understand the lesson.	13
		pandemic process, my illness anxiety decreased with this education method.	10
		I had the opportunity to spend more time with my family	8
	Negative	Practical training was not supposed to be given remotely.	16
		The evaluations of the courses made with distance education were insufficient.	19
		At least the practical parts of the courses should have been face-to-face training.	23
		Practical lessons should have been postponed until the pandemic was over	16
		I had problems in reaching the instructor.	7

In Table 3, students' opinions and suggestions regarding distance nursing education and training are included under two main themes, positive and negative. In the positive main theme, students found the opportunity to listen to the lessons over and over again (f=16), the absence of a crowded classroom environment made it easier to understand the lesson (f=13), the decrease in illness anxiety during the pandemic process with distance education (f=10), and spending more time with their family, respectively. They stated that they have an opportunity (f=8). Considering the negative sub-theme of the students regarding distance education, the students said that at least the application parts of the courses should be face-to-face education (f=23), the evaluations of the distance education courses were insufficient (f=19), and that the applied education should not be given remotely (f=23). 16) stated that the applied courses should be postponed until the pandemic ends (f=16) and that they had problems in reaching the instructor (f=7).

Sample expressions of students' opinions and suggestions about distance nursing education and training;

*K1. I lost my brother due to covid. For this reason, the pandemic process has increased my illness anxiety a lot. If it was face-to-face education, I was planning to freeze the school. Distance education has been better for me. In this way, I had the opportunity to follow the lessons without leaving my home.*

*K9. Thanks to distance education, I had the opportunity to listen to the lessons again. There was no crowded classroom environment and I felt like I was doing private lessons with the teacher. Sometimes I could not ask questions from the teacher in the lessons, but thanks to distance education, I can only ask any question I want via message. For shy people like me, distance education is much more effective.*

*K12. Giving an applied education such as nursing from a distance is meaningless. It is not enough to follow the courses theoretically after failing to do the applications. I think nursing education should be suspended until the pandemic is over.*

*K20. I had no problems with distance education in theoretical lessons. But it becomes very difficult for us to understand in practical lessons. The application parts of the lessons should be made up as soon as possible. I am terrified of graduating without compensation because I feel inadequate to apply.*

*K28. Since I was working, I was generally following the lessons from the recording. Therefore, when I had a question about the lesson, I had to e-mail or text the teacher. Sometimes the instructor does not return or returns late. It was easier to reach the teacher in face-to-face education.*

**Table 4. Students ' views on the effect of the pandemic process on their professional anxiety and satisfaction**

subject area	Themes	Codes	f
Professional opinions	Positive	In this process, nursing was defined as a hero.	5
		People understood the importance of nursing	6
		I have reached my professional satisfaction	6
	Negative	Nursing did not see the value it deserved in this process.	21
		I think the distance education I received is insufficient	17
		I am undecided about whether or not I can do my job.	6
		I am concerned about professional value	16
		Nurses are not financially supported	15

Table 4, the opinions of the students regarding the effect of the pandemic process on their professional anxiety and satisfaction are given under two main themes, positive and negative. The students stated that they reached more professional satisfaction in the positive theme (f=6), people understood the importance of nursing (f=6) and that nursing was defined as a hero in this process (f=5). In the negative sub-theme, the students, respectively, could not see the value that nursing deserved in this process (f=21), the distance education they received was insufficient (f=17), they were worried in terms of professional value (f=16), and the nurses were not supported financially and morally (f= 15) and that they were undecided about whether or not to do the profession (f=6).

Sample expressions of students regarding the effect of the pandemic process on their professional anxiety and satisfaction:

*K7. In this process, I was proud to study nursing. I really liked that nurses were presented as heroes on television and social media. I said I'm glad I'm studying nursing. This process saw how self-sacrificing and helpful the nurses were.*

*K14. Even my friends around me, who didn't want me to do this job because I'm a man, started to say what a valuable profession it is in this process. I used to be ashamed to say that I studied nursing, but I proudly say that I will be a nurse because I understand how important a profession it is in this process.*

*K16. Nursing was the occupational group most negatively affected by the pandemic. He worked harder and could not get paid, and he could not find a place to leave his child and had to take him*

*to the hospital, but he was not supported financially and morally. Despite working in harsh conditions, I think that nursing does not see the value it deserves.*

*K23. I do not think that I can work in any clinic with the education I received in this process. I tried to learn most of the applications by watching them on the computer. I feel inadequate. In this sense, I am concerned.*

*K30. Knowing that I can't go through a difficult education process and work under harsh conditions and not get paid, drives me away from this profession. Even in such a process, the value of nursing was not understood. I left another department with very good dreams and came to nursing. But now I'm undecided about whether to nurse or not. I am looking for other job alternatives.*

## DISCUSSION

Most of the students stated that the application videos given to the students in distance education are not sufficient/do not reflect the reality (Table 1). On April 9, 2020, the Nursing Education Association announced to the public that nursing students should complete their clinical training with video-assisted simulation applications and that students who do not complete these trainings should not be graduated (HEMED 2020). During this period, many nursing faculties made available videos open access (Vatan, Avdal, Yağcan, Şanlı 2020). Access to training guides and videos on topics such as the use of personal protective equipment and hand hygiene, prepared under the leadership of the Turkish Nurses Association (THD), was also available (THD 2020). However, it is thought that there are problems due to the sudden decision to transition to distance education and the lack of technological infrastructure in some institutions. In a similar study, it was stated that the students' focus on the lessons was negatively affected because the necessary infrastructure preparations could not be made due to the sudden transition of the students to distance education (Eren et al. 2021). In this study, in the answers to the open-ended questions asked to the students, “*It is very difficult to understand nursing skills in distance education. Instructors explain using videos in the lessons, but it seems very easy when they do it. It is not enough to watch unless I experience it myself*” emphasizes the importance of experience in students' skill learning. On the other hand, the fact that the students stated that they had the opportunity to watch the application again with the help of videos shows the expectation of video support even if it is a face-to-face application.

Considering the technical problems experienced by the students, it was determined that they had the most problems with internet access (Table 2). In similar studies, they stated that students had limited opportunities in internet access during the pandemic process (Sahu, 2020; Wang et al. 2020). Due to the rapid transition to distance education, it is thought that there are similar results all over the world. Considering the other technical problems experienced by the students, it was determined that they had problems in obtaining computers and they had technical problems in online exams (Table 2). In a similar study, it was emphasized that with the sudden decision taken during the pandemic process, the course materials remained in different provinces, the students in rural areas had difficulties in obtaining computers, and the students had problems while preparing for the exams and preparing their homework (Kurtüncü, Kurt 2020).

Considering the students' views on distance education, most of the students stated that the application parts of the courses should be given through face-to-face education (Table 3). Different research results have been found on this subject. Keskin and Özer stated in their study that there is

no significant difference between web-based education and face-to-face education in terms of student satisfaction in studies conducted with nursing students (Keskin and Özer 2020). In the study of Lovric et al., students stated that the practical training they received both in the classroom and in the clinic was a worrying situation for themselves and their families in terms of contagion (Lovric et al 2020). However, in studies conducted, students emphasize that distance education is not as effective as face-to-face education (Keskin and Özer 2020). In a study, it was stated that the use of web-based and live course teaching methods together is more effective in teaching (Budzinski et al, 2012). Among the answers given to the open-ended questions in this study, “*Thanks to distance education, I had the opportunity to listen to the lessons again. There was no crowded classroom environment and I felt like I was doing private lessons with the teacher. Sometimes I could not ask questions from the teacher in the lessons, but thanks to distance education, I can only ask any question I want via message. The statement “Distance education is much more effective for shy people like me”* shows the expectation of students to use web-based teaching methods in live lessons.

Students on the effect of the pandemic process on their professional anxiety and satisfaction were examined, most of the students stated that they did not see the value that nursing deserved in this process (Table 4). In this study, it is thought that students' professional satisfaction is negatively affected because they cannot complete their nursing education as they should and cannot be in a skill learning environment. Contrary to this study, there are also studies in the literature reporting that professional satisfaction has increased due to the understanding of the importance of the nursing profession during the pandemic period and the positive increase in its social image (Ismail et al.2020; Nielsen, Dieperink 2020; Taş and Dalcalı 2021). In the answers given to the open-ended questions asked to the students in this study, “*I don't think I can work in any clinic with the education I received in this process. I tried to learn most of the applications by watching them on the computer. I feel inadequate.*” The expression shows that nursing students who graduated with distance education are anxious in terms of professional competence. Although the importance of the nursing profession and the fact that it is an indispensable part of the health team are frequently emphasized in the media during the pandemic period, it can be thought that the reason for the professional concerns of the students in this study is the understanding of the heavy working conditions of the nurses during the pandemic and their professional competence concerns.

## SUGGESTIONS

Using web-based teaching methods to support face-to-face education in nursing,

By developing distance education infrastructure, professional videos are prepared and students can access these videos whenever they want,

Providing teaching methods in which the student is active, especially in practice-oriented courses,

Repetition of applied courses in an accelerated manner in the next semester,

In this process, creating opportunities for students with limited opportunities,

Is recommended to develop programs that will increase students' professional motivation.

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