



Perceptions and Experiences of Nursing Students About Distance Education During The Covid-19 Pandemic in Turkey: A Phenomenological Study

Türkiye’de Hemşirelik Öğrencilerinin Covid-19
Pandemisindeki Uzaktan Eğitime İlişkin Algı ve
Deneyimleri: Fenomenolojik Bir Çalışma

Selin DEMİRBAĞ¹, Dilek ERGİN², Nesrin ŞEN CELASIN³, Duygu KARAARSLAN⁴

¹Manisa Celal Bayar University, Faculty of Health Sciences, Manisa
· selin.demirbag.cbu@gmail.com · ORCID > 0000-0002-4606-5171

²Manisa Celal Bayar University, Faculty of Health Sciences, Manisa
· dilekergin.cbu@gmail.com · ORCID > 0000-0001-6451-0278

³Manisa Celal Bayar University, Faculty of Health Sciences, Manisa
· nessen_72@yahoo.com · ORCID > 0000-0001-5130-0335

⁴Manisa Celal Bayar University, Faculty of Health Sciences, Manisa
· duygu8686@hotmail.com · ORCID > 0000-0001-5583-2638

Makale Bilgisi/Article Information

Makale Türü/Article Types: Araştırma Makalesi/Research Article

Geliş Tarihi/Received: 24 Ekim/October 2022

Kabul Tarihi/Accepted: 18 Ocak/January 2024

Yıl/Year: 2024 | **Cilt – Volume:** 9 | **Sayı – Issue:** 1 | **Sayfa/Pages:** 157-172

Atf/Cite as: Demirbağ, S., Ergin, D., Şen Celasin, N., Karaarslan, D. "Perceptions and Experiences of Nursing Students About Distance Education During The Covid-19 Pandemic in Turkey: A Phenomenological Study"
Journal of Samsun Health Sciences 9(1), April 2024: 157-172.

Sorumlu Yazar/Corresponding Author: Selin DEMİRBAĞ

Yazar Notu/Author Note: The abstract of this paper was presented as oral presentation at the 3rd International Mediterranean Pediatric Nursing Congress, 12-15 October 2022, Ankara, Turkey.

PERCEPTIONS AND EXPERIENCES OF NURSING STUDENTS ABOUT DISTANCE EDUCATION DURING THE COVID-19 PANDEMIC IN TURKEY: A PHENOMENOLOGICAL STUDY

ABSTRACT

Objective: The COVID-19 pandemic, which caused a worldwide health and social crisis, has also directly affected the education system. The aim of this study was to explore and understand the perceptions and experiences of nursing students' about distance education during the pandemic.

Method: A phenomenological qualitative study was conducted with undergraduate nursing students from a state university in Manisa, Turkey. This study used a purposive sampling method and collected data through semi-structured interviews. Online interviews were conducted with nursing students (n=16) in April 2021. Data was analyzed using the hermeneutic interpretative approach.

Results: The ages of the participants were between 21-26. 74 codes gathered under three main themes emerged: advantages and gains were classified as "positive aspects"; disadvantages, needs, and losses were classified as "negative aspects"; occupation-related, learning-related, and personal aspects were classified as "emotions.

Conclusion and Suggestions: The students mentioned that distance nursing education has both positive and negative aspects. The most mentioned issue is that although everything is more accessible on theoretical knowledge of nursing, the practice training is not suitable for the distance education system and is insufficient. It is a fact that distance nursing education cannot provide the desired or sufficient output because nursing practices cannot be carried out remotely.

Keywords: Nursing Education, Distance Education, Qualitative Study.



TÜRKİYE'DE HEMŞİRELİK ÖĞRENCİLERİNİN COVID-19 PANDEMİSİNDEKİ UZAKTAN EĞİTİME İLİŞKİN ALGI VE DENEYİMLERİ: FENOMENOLOJİK BİR ÇALIŞMA

ÖZ

Amaç: Dünya çapında bir sağlık ve sosyal krize neden olan COVID-19 pandemisi, eğitim sistemini de doğrudan etkilemiştir. Bu çalışmanın amacı, hemşirelik

öğrencilerinin pandemi sırasındaki uzaktan eğitime ilişkin algılarını ve deneyimlerini anlamak ve belirlemektir.

Yöntem: Türkiye Manisa’da bulunan bir devlet üniversitesinden hemşirelik lisans öğrencileri ile fenomenolojik nitel bir araştırma yapılmıştır. Bu çalışmada amaçlı örnekleme yöntemi kullanılmış ve veriler yarı yapılandırılmış görüşmeler yoluyla toplanmıştır. Hemşirelik öğrencileriyle (n=16) Nisan 2021’de çevrimiçi görüşmeler yapılmıştır. Veriler tematik yorumlayıcı yaklaşım kullanılarak analiz edilmiştir.

Bulgular: Katılımcıların yaşları 21-26 arasındadır. Üç ana tema altında toplanan 74 kod ortaya çıkmıştır: avantajlar ve kazanımlar “olumlu yönler” olarak sınıflandırılmış; dezavantajlar, ihtiyaçlar ve kayıplar “olumsuz yönler” olarak sınıflandırılmış; meslekle ilgili, öğrenmeyle ilgili ve kişisel yönler “duygular” olarak sınıflandırılmıştır.

Sonuç ve Öneriler: Öğrenciler uzaktan hemşirelik eğitiminin hem olumlu hem de olumsuz özellikleri olduğunu belirtmişlerdir. En çok dile getirilen konu, hemşirelikte teorik bilgiye daha fazla erişilebilir olmasına rağmen uygulama eğitiminin uzaktan eğitim sistemine uygun olmadığı ve yetersiz olduğudur. Hemşirelik uygulamaları uzaktan yürütülemediği için uzaktan hemşirelik eğitiminin istenilen veya yeterli çıktıyı sağlayamadığı bir gerçektir.

Anahtar Kelimeler: Hemşirelik Eğitimi, Uzaktan Eğitim, Nitel Çalışma.



INTRODUCTION

The World Health Organization (WHO) China Country Office identified a novel coronavirus that emerged in Wuhan City, China on 31 December 2019, which had not been seen in humans before. The disease was later called COVID-19, and in a period as short as three months after it broke out, it swept over the whole globe (WHO, 2020a). The first case was recorded on 11 March 2020 in Turkey and certain measures were taken to fight against the pandemic as in the whole world. In line with the recommendations of the Ministry of Health, compliance with personal hygiene, mask-wearing, filiation and keeping social distance in order to mitigate the spread of coronavirus were the primary measures taken for pandemic management in Turkey (Ministry of National Health, 2020). In the beginning, like in other countries, Turkey suspended face-to-face education, and a sudden transition to distance education took place in the fight against the pandemic (Haslam, 2020).

Background

The world has encountered unprecedented difficulties because of the Corona Virus Disease 2019 (COVID-19) global pandemic (WHO, 2020b). The pandemic has affected all fields, including education. As the crises got more severe, many states closed schools, colleges and universities to safeguard their students, teachers and nations. According to the policies of the countries, states decided to transition to distance education rapidly in order to ensure continuity in education (Agu et al., 2021).

The term “Distance Education” defines a planned and systematic practice of education where the student and instructor are physically separated and the student-instructor interaction and communication is mediated by television and computer-based technologies (Akdemir, 2011). It provides teachers and students with individual and collaborative working environment. However, besides the advantages offered by distance education, it is a fact that this type of education cannot be replaced by face-to-face education and that the sudden change of a large amount of teaching to online brings about some limitations (Lau et al., 2020).

Nursing students had to cope with the difficulties of adapting to online platforms rapidly. In addition, upon transition to distance learning, laboratory and clinical practices could not be performed as well (Agu et al., 2021). Cancellation of clinical practices due to the pandemic is reported to cause anxiety, fear, stress and uncertainty among nursing students (Morin, 2020).

Nursing education was conducted online during the pandemic period in Turkey. Nursing students who attended distance education will graduate and start their professional life. Nursing students’ perceptions and experiences of distance education are factors that have a direct effect on the quality of the education they receive. Therefore, it is considered that determining nursing students’ perceptions and experiences of distance education will help in describing and revealing the situation in a more understandable way.

Study aims: The aim of study was to determine nursing students’ perceptions and experiences of distance education during the COVID-19 pandemic.

Study Questions

Answers to three basic questions were sought in the study.

1. What do you think about distance education in nursing during the COVID-19 pandemic?
2. What are the benefits of distance education in nursing?
3. What are the challenges of distance education in nursing?

METHODS

Design: A phenomenology design was used to explore undergraduate nursing students' perceptions of their experiences with distance education during the COVID-19 pandemic. The purpose of phenomenological design is to understand the essence of an object by reducing subjective and private experiences of an event to an explanation with universal qualities (Creswell, 2014).

Setting and Participants: The study was carried out in Manisa Celal Bayar University (Turkey), a state university, from February to July 2021. The study group was selected by purposeful sampling method. Participants were 3rd year nursing students who were taken half of their education face-to-face and half online. While the students in the research group expressed their experience and perception of distance education in nursing, it is thought important that they have received face-to-face education as well as online education. A purposive sample of 3rd-year nursing students were recruited (n=16) until data saturation (Guest et al., 2006) was reached. Saturation was assessed when the data began to repeat in the 14th participant. Two more participants were interviewed just to be sure.

Inclusion Criteria: 3rd-year nursing students at Manisa Celal Bayar University, Signing a consent form for participation.

Exclusion Criteria: 3rd-year non-nursing students at Manisa Celal Bayar University, No consent form signed.

Data Collection: Data were collected from March to June 2021 through online, in-depth, and semi-structured interviews by researcher (S.D. PhD). The researchers developed an interview guide based on an extensive literature review. The guide consists of the explanation of the study aim, general questions, questions related to students' demographic background, and open-ended questions (Table 1) to allow the participants to explain their experiences with distance education in detail. The guide was validated by an expert on qualitative approaches to ensure that the questions met the study aims. Due to the pandemic, the interviews were conducted using online platforms. The purpose of the interview method is to try to understand the experiences of the participants in the subject and how they perceive and express the relevant subject (Seidman, 2006). Audio and video recordings of the interviews were taken. The interviews were conducted directly by the researcher (S.D.) on an online platform (Zoom Meeting). After the interview, one of the interviewees made additions, and a written record was taken and included in the analysis.

Table 1. The semi-structured interview guide

1. What do you think about the distance education system in nursing?
2. What do you think are the benefits of distance education for the quality?
3. What do you think are the harms of distance education for the quality?
4. Could you explain the reasons for the type of education you want to continue your nursing education after the epidemic?
5. What direction will distance education give to nursing education?
6. How do nurses who graduate with distance education affect the nursing profession?

Before the data collection process, an appointment was made with the interviewers for the most appropriate time. In addition, the purpose and questions of the study were explained. Each participant was interviewed only once. The clarity and answerability of the questions were tested on two students who were not included in the study group. The duration of each interview was approximately half an hour.

Data Analysis: A thematic analysis method was used in the research, and the data were analyzed using the inductive method. A thematic content analysis was performed by using the seven steps offered by Diekmann et al. (1989). The process of analysis derives themes/categories from the data itself rather than categorizing data based on predefined categories (Diekmann et al., 1989).

A researcher (S.D. and D.E.) independently reviewed and transcribed the audio recordings to text immediately after the completion of each interview. Additionally, transcripts were returned to participants for comment and/or correction. Participants did not provide feedback on the findings. To understand participants' descriptions of their educational experiences with distance education, the two researchers read the transcribed data in detail several times. The transcript was analyzed in the MAXQDA 2020 computer program by the researchers (S.D. and D.E.), who coded keywords, phrases or expressions related to nursing students' distance education experiences. Subsequently, the two researchers grouped the categorizing codes into themes by organizing meaningful expressions into meaningful units. During the coding process, the researchers reached a consensus on thematic explanations that best described the findings. It was aimed to contribute to the validity of data analysis by comparing the codes and categories with the literature. After the themes were extracted, a meeting was held by the researchers to reach a consensus on the themes. The data was analyzed simultaneously with data collection. Other researchers (N.Ş.C. and D.K.) at the session reported that the findings were accurate and represented a correct reflection of their experience. The research group comprised nurses with expertise in academic and clinical nursing, all of whom have PhDs and are female.

Quality Criteria: During the research process, researchers took reflection into account to make them aware of how their own biases could affect the research process and results (Lincoln and Guba, 2000). Validation was done by two authors (Leung, 2015). The answers were coded separately by two researchers (S.D. and D.E.), and a single code list was prepared according to coding consistency. To calculate the intercoder confidence, the formula ($\text{Reliability} = (\text{consensus} / (\text{consensus} + \text{intercoder})) \times 100$) suggested by Miles and Huberman (1994) was used, and the intercoder reliability was calculated as 85%. One of the researchers (S.D) is certified in qualitative data analysis. The COREQ checklist was used as a guide in the preparation of the study report (Tong et al., 2007).

Ethics: The study has been approved by the Ethical Committee of Manisa Celal Bayar University (Approval date:10/02/2021, File number:20.478.486/747). Confidentiality, privacy, and participants' well-being and human rights were safeguarded throughout the study. To maintain confidentiality, participants were given numbers. An information sheet describing the purpose of the study was shared with participants, after which they were asked to sign a consent form prior to the data collection. Participation was voluntary and participants were free to withdraw from the study at any time.

RESULTS

All the participants were aged between 21 and 26. Five (31%) of the participants were male, and 11 (69%) of the participant were female. Almost all of the participants (94%) were living in the province (Table 2).

Table 2. Demographic characteristics of nursing students

Participant	Availability of own computer	Internet access	Tool in distance education	Technical problem status	Follow lessons online	Follow lessons offline	Education type preference
P1	Yes	Yes	Computer	Rarely	Always	Rarely	Hybrid
P2	Yes	Yes	Computer	Sometimes	Always	Rarely	Hybrid
P3	Yes	Yes	Tablet	Sometimes	Always	Rarely	Hybrid
P4	Yes	Yes	Computer	Rarely	Always	Often	Hybrid
P5	Yes	Yes	Telephone	Sometimes	Often	Sometimes	Hybrid
P6	No	Yes	Computer	Sometimes	Often	Sometimes	Face to face
P7	Yes	Yes	Computer	Often	Often	Often	Face to face
P8	Yes	Yes	Telephone	Sometimes	Always	Sometimes	Hybrid
P9	Yes	Yes	Telephone	Rarely	Always	Sometimes	Hybrid
P10	Yes	Yes	Computer	Often	Always	Sometimes	Face to face
P11	Yes	Yes	Computer	Sometimes	Always	Often	Hybrid
P12	Yes	Yes	Computer	Rarely	Rarely	Rarely	Face to face
P13	Yes	Yes	Telephone	Often	Always	Sometimes	Face to face
P14	Yes	Yes	Computer	Sometimes	Often	Rarely	Face to face
P15	Yes	Yes	Computer	Rarely	Always	Rarely	Hybrid
P16	Yes	Yes	Computer	Sometimes	Often	Rarely	Face to face

Three main themes emerged: advantages and gains were classified as “positive aspects”; disadvantages, needs, and losses were classified as “negative aspects”; occupation-related, learning-related, and personal aspects were classified as “emotions” (Figure 1).

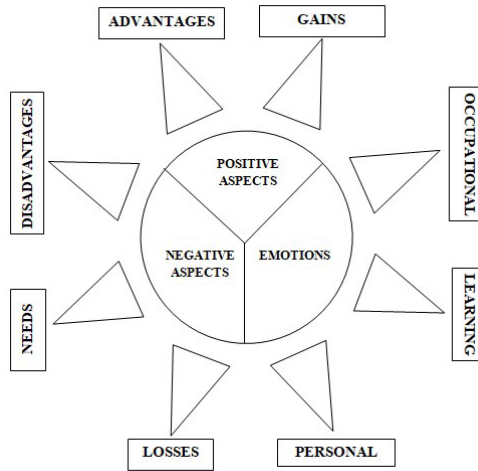


Figure 1. Themes and subthemes generated from the findings

Theme 1: Positive Aspects

The students stated that there were many positive aspects of distance education in nursing, and the students listed the **advantages** as reaching the lecturer, the materials used in the course and the course videos easily, saving time because they did not lose time going to campus; feeling comfortable because they could take a comfortable position during the lesson; preventing transmission because they were not in crowded classrooms, and improving learning with many techniques included in distance education.

“Distance education gave me extra time. I wasted time....”(P9)

“I had a chance to remember that the lecturer said what was important and underlined that while listening at that moment and by repeating....”(P4)

Nursing students had the chance to be involved in many individual and group studies in distance education. They improved themselves with the increase in their chance of participation due to the fact that many scientific activities were done online. They stated that they did the literature review often in the nursing field with study activities. These were evaluated as **gains** in terms of education.

“I didn’t know how to use a computer well. Maybe that’s what I learned in distance education...”(P16)

“Right now I am constantly reading articles for assignments...I can say that I want to read this article today...”(P4)

Theme 2: Negative Aspects

Students expressed several **disadvantages** of distance education. During the interviews, nursing students frequently talked about the fact that nursing education was an applied education and distance education did not provide a sufficient contribution to nursing practice. Students stated that they had problems in adapting to this fast-paced process, most interviews that were not conducted face to face did not result in the desired way, there was no external control mechanism during the lesson, and home conditions often prevented them from concentrating. The assessment system was insufficient due to being online. They also experienced orthopedic and eye problems in terms of health.

“We couldn’t attend the classes very actively. There were too many factors in our environment that could distract us...”(P7)

“My nursing practice skills were very good at the clinic placement. I don’t know how it is right now. I can’t try it on anyone here either...”(P2)

There were inadequacies and deficiencies in the technical infrastructure in Turkey, especially in rural areas. The students mentioned that they had problems in connecting and attending the course and that had difficulty in obtaining the basic **needs** for distance education such as computers, tablets, telephones, and the internet.

“I think the biggest challenge in this regard is the cost of the internet and devices and the lack of meeting their needs...”(P1)

“I had a systemic problem. It dropped me out of class, the electricity cut off; I didn’t have internet packages from time to time. I had access problems...”(P15)

As a result of the pandemic, students who spent all their time at home when they should be at school mentioned that their interactions with their friends have decreased and their socialization has been badly affected and they have experienced **losses**.

“My life has become my room...”(P2)

“We were in communication at school, but this cannot be achieved in distance education....We forgot to talk to each other...”(P11)

Theme 3: Emotions

Students felt a variety of ambivalent positive and negative emotions. Depending on the effectiveness of the changing education system, they moved away from the **occupation** in this process and felt that they would be incompetent when they started the job.

“When I start to work, I will be afraid that someone will say to us that you don’t even know about it. I think it’s embarrassing for a nurse that...I feel inadequate and incomplete...”(P14)

“Online education took us away from the department, like me. Now that I’m used to the department. I feel much more distant...”(P6)

Distance education in nursing has revealed different **learning** levels and learning processes.

“Next year we will graduate, I don’t know how it will be because I didn’t learn anything...”(P1)

“Definitely, the process of receiving and using information is better; I reveal and produce something...”(P6)

Nursing students’ emotions **personally** concentrated on the basis of fear and anxiety.

“The theoretical part is permanent, but unfortunately, we forget the practices more and more. That’s why I am afraid...”(P3)

“I have my concerns even now. As I approach the patient, as if I have been an ignorant nurse, because I couldn’t do clinical placement...”(P12)

DISCUSSION

COVID-19 has caused healthcare professionals, who are at the very center of the crisis, to experience more severe anxiety, fear, distress and anger. Nursing students have also experienced considerable stress and worried about their own professional lives (Huang et al., 2020). As stated by Lazarus and Folkman (1984), detecting early symptoms of stress and burnout in nursing students is important to reduce its negative effects and understand how to support them most appropriately. At times of crisis like COVID-19 our students are expected to show academic performance and function. The aim of our study is to evaluate nursing students’ perceptions and experiences of distance learning during the COVID-19 pande-

mic. The results of the study showed that the students' expressions about distance nursing education were centered on the themes of "Positive Aspects", "Negative Aspects" and "Emotions".

The students shared their opinions about the insufficiency of laboratory and clinical courses in nursing education. Laboratory and clinical courses play a significant role in students' learning, experiencing and getting skilled in nursing interventions (Suarez-Garcia et al., 2017). This result is similar to other studies revealing that laboratory and clinical courses are indispensable for students and there would be no alternative for them (Thapa et al., 2021; Kürtüncü and Kurt, 2020).

Face-to-face education was suspended during the battle against the pandemic, and a transition was made to distance education (Haslam, 2020). The results of our study showed that this rapid and compulsory transition led to adaptation and concentration problems among students. Another qualitative study conducted with nursing students reported that factors that challenged learning were caused by the lack of concentration experienced in distance education and memory problems (Lovric et al., 2020). Findings of other studies support our finding as well (Terkeş and Yamaç, 2021; Lovric et al., 2020). The physical place where distance education is conducted under pandemic conditions is "home". Since home settings are spaces of daily life shared with others, it could be said that they lead to students facing barriers while following their courses.

For nursing students, online education negatively influences the interaction between the instructor and student, student participation, and student satisfaction (Haslam, 2020). Similar to our finding, some other studies have reported that students had problems in communication and felt insufficiency in socialization (Afşar and Büyükdöğün, 2020; Thapa et al., 2021). In order to offer the best learning experiences in online education, attempts should be made to encourage and maintain participation in the presence of a teacher. Moreover, promoting cooperative learning methods with peers would facilitate improving communication skills and structuring and implementing information.

Students expressed that they experienced some health problems due to distance education. Studies have shown that students have suffered from headaches, neck pain, back pain and pain in the eyes while their sleep quality has decreased as a result of distance education (Balıcı et al., 2021; Dungal, 2021). Sitting in front of the computer, staying in the same position for a long time, and looking continuously at the screen can cause health problems.

Academic fraud in the form of cheating in online assignments and exams is the biggest concern due to the possibilities of people doing the assignments or taking the exams other than the student (Rowe, 2004). Similarly to other studies (Man-

cuso, 2009; Kürtüncü and Kurt, 2020), we found that the impossibility of ensuring control over assessment systems resulted in the perception of “unfair assessment” among students, which caused distrust.

Distance education is an educational technology practice that can be held only on online media using devices such as computers, telephones, and tablets (Akdemir, 2011). Another result from the students’ perspective is the “digital gap” between the poorest and the wealthiest students. This problem also includes the internet connection and its quality to access online resources as well as technological restrictions due to financial insufficiencies (Haslam, 2020; Dhawan, 2020). Since technological equipment and infrastructure are the primary needs for distance education, they should certainly be met. The present study has shown that students faced the problems of insufficiency in technological equipment and infrastructure, difficulty in internet access and technological risks. Other studies have also reported similar results (Dangal, 2021; Terkeş and Yamaç, 2021; Kürtüncü and Kurt, 2020; Eren et al., 2021).

The present study revealed that it saves time in terms of travelling and attending regular classes. They can contact peers and teachers and attend class without necessarily being at schools. In addition, the study has revealed that distance education has brought cost efficiency by reducing the travelling costs to go to and come back from school. This finding parallels the findings of other studies reporting that distance education, which can be delivered anywhere and anytime, provides considerable comfort, saves time, and makes economic profit for students (Thapa et al., 2021; Kumar et al., 2021).

Electronic content is easier to update than printed material; e-learning technologies enable educators to revise content simply and quickly. Students have learning contents, learning order, learning pace and time control. In this respect, electronic content makes it possible to be developed in such a way as to satisfy individual learning objectives. Internet technologies allow digital content to be commonly shared with multiple users at the same time and at any place (Bichsel, 2013). This finding, similar to other studies, has shown that students are happy to be able to have rapid access to information, materials and people electronically any time they want (Thapa et al., 2021; Eren et al., 2021).

Nursing students find clinical practices relatively stressful (Suarez-Garcia et al., 2018). There has been an increase in negative emotions like stress and anxiety with the effect of the pandemic because of the increase in the uncertainty of the situation. However, we found that students spent this period with less anxiety and stress with distance education. A study conducted in the early days of the pandemic showed that the sudden disruption of clinical practices had a significant impact on students (Diaz et al., 2021). A study conducted in Turkey found that nursing stu-

dents experienced moderate levels of anxiety during their clinical practice during the pandemic (Yazıcı and Ökten, 2022).

Different from face-to-face education, students use online platforms and products for their education all the time. The pandemic period is a long process. Similarly to other study findings (Eren et al., 2021; Özses et al., 2021), we found that this process yielded students who can use technology and conduct research. Distance education enables students to achieve their learning objectives since it is more economical and easier than face-to-face education in obtaining information, the information is always updateable, and it is easy to reach the instructor and course materials.

Students expressed that they felt insufficiency and lack of competence in learning during the distance-learning period, and they experienced fear and anxiety. Similar to other studies, our findings show that “lack of competence” and “anxiety and fear” were the most remarkable factors (Suarez-Garcia et al., 2017; Lovric et al., 2020). It is thought that these factors may be interrelated as a student may feel helpless or uncertain in a certain situation because of not receiving sufficient education. In addition, the fact that theoretical courses weren’t supported with observations and experiences in hospital visits may be the reason behind “the lack of competence” (Corlett, 2000). The reason for this is the failure to hold laboratory and clinical courses in distance education. It is inevitable for a student who doesn’t feel professionally competent to experience anxiety and stress.

Limitations

The findings of this study should be interpreted cautiously, as the data were collected from a public university in western Turkey. The results are limited to the participants’ personal reports and the setting in which the research was conducted. The small group of participants doesn’t represent the whole population of nursing students. The findings cannot be generalized as they were conducted using a qualitative research method. Including only nursing students in the study caused the study only to provide scientific results that will guide nursing education policies. The fact that the researchers don’t have detailed information about students’ personal learning styles and skills limits the research.

Conclusion and Suggestions

Based on these findings, it can be concluded that undergraduate nursing students in Turkey see the “distance learning” experience as both challenging and effective. The students implied that they had some advantages in terms of comfort and saving time and reached theoretical information easily while experiencing anxiety

and a lack of competence in clinical processes. Students prefer practical experiences to achieve competence in clinical courses and laboratories. In addition, simulations, video sessions and other interactive e-learning materials could positively affect students' learning experiences.

Admitting that we have reached a point, which is very far away from the education system before COVID-19, the present study is considered to have several meanings for nursing education and research. Nursing educators must be prepared to create environments that promote online learning and develop effective and efficient communication tools, particularly for student interaction. In order to make progress, nursing students should receive continuous training and support on nursing informatics and be equipped with the necessary life-long learning skills to provide quality care. Moreover, it is recommended that hospitals or other health-care institutions be aware of this when recruiting university graduates and consider it when planning their orientation programs. It is also recommended that further studies be conducted questioning students' individual learning styles and skills. In addition, studies should be carried out with students who graduated from distance education and started working to determine the outcomes of the process. Distance education should be monitored and improved by preparing policies, guidebooks and handbooks to manage distance education by ensuring the development of all competencies of the students in nursing schools.

Conflict of Interest

No conflict of interest was declared by the authors.

Acknowledgements

The authors thank all students who participated in the study.

Author Contribution

Design of the Study: SD (%50), DE (%30), NŞC (%10), DK (%10)

Data Collection (Data Acquisition): SD (%100)

Data Analysis: SD (%60), NŞC (%25), DK (%15)

Article Writing (Writing Up): SD (%80), DE (%20)

Article Submission and Revision: SD (%100).

REFERENCES

- Afşar, B., & Büyükdöğün, B. (2020). Assessments of FBAS and FSHS students about distance education during the Covid-19 pandemic period. *Karatay Journal of Social Studies*, 5, 158-179.
- Agu, C.F., Stewart, J., McFarlane-Stewart, N., & Rae, T. (2021). COVID-19 pandemic effects on nursing education: looking through the lens of a developing country. *International Nursing Review*, 68(2), 153-158. <https://doi.org/10.1111/inr.12663>
- Akdemir, O. (2011). Teaching math online: current practices in turkey. *Journal of Educational, Technology Systems*, 39(1), 47-64. <https://doi.org/10.2190/ET.39.1.e>
- Balci, E., Durmuş, H., & Sezer, L. (2021). Does distance education create a risk in the development of addiction in corona days?. *Journal of Dependence*, 22 (1), 100-102.
- Bichsel, J., 2013. The state of e-learning in higher education: An eye toward growth and increased access. EDUCA-SE Center for Analysis and Research, Louisville, CO.
- Corlett, J. (2000). The perceptions of nurse teachers, student nurses and preceptors of the theory-practice gap in nurse education. *Nurse Education Today*, 20(6), 499-505. <https://doi.org/10.1054/nedt.1999.0414>
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*. SAGE Publications.
- Dangal, M. (2021). Health problems experienced in online learning during Covid-19 in Nepali Universities. *International Journal of Online Graduate Education*, 4(1). <https://doi.org/10.5281/zenodo.4509020>
- Dhawan, S. (2020). Online learning: a panacea in the time of Covid-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177/004723952093401>
- Diaz, K., Staffileno, B. A., & Hamilton, R. (2021). Nursing student experiences in turmoil: A year of the pandemic and social strife during final clinical rotations. *Journal of Professional Nursing*, 37(5), 978-984. <https://doi.org/10.1016/j.profnurs.2021.07.019>
- Diekelmann, D., Allen, C., & Tanner, C.A. (1989). *The NLN Criteria for Appraisal of Baccalaureate Programs: A Critical Hermeneutic Analysis*. National League for Nursing Press:New York.
- Eren, D.Ç., Korkmaz, M., Yıldırım, Ö.Ö., & Avcı, İ.A. (2021). Investigation of attitude and satisfaction levels of nursing students to distance education during the Covid-19 pandemic process. *Journal of Anatolia Nursing and Health Sciences*, 24(2), 246-254. <https://doi.org/10.17049/ataunihem.862820>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. <https://doi.org/10.1177/1525822X05279903>
- Haslam, M.B. (2020). What might COVID-19 have taught us about the delivery of nurse education, in a post-covid-19 world?. *Nurse Education Today*, 5(97), 1-3. <https://doi.org/10.1016/j.nedt.2020.104707>
- Huang, L., Lei, W., Xu, F., Liu, H., & Yu, L. (2000). Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: A comparative study. *PLoS One*, 15(8), 1-12. <https://doi.org/10.1371/journal.pone.0237303>
- Kumar, H.S., Joshi, A., Malepati, R.N., Najeeb, S., Balakrishna, P., Pannerselvam, N.K, & et al. (2021). A survey of e-learning methods in nursing and medical education during covid-19 pandemic in India. *Nurse Education Today*, 99, 1-8. <https://doi.org/10.1016/j.nedt.2021.104796>
- Kürtüncü, M., & Kurt, A. (2020). Problems of nursing students in distance education in the Covid-19 pandemic period. *Eurasian Journal of Social and Economic Research*, 7(5), 66-77.
- Lau, J., Yang, B., & Dasgupta, R. (2020). Will the coronavirus make online education go viral? *Times Higher Education* 12. Retrieved December 19, 2021 from <https://www.timeshighereducation.com/features/will-coronavirus-make-online-education-go-viral>
- Lazarus, R.S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company: New York.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4(3), 324-327. doi: 10.4103/2249-4863.161306
- Lincoln, Y.S., & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In: Denzin, N.K., Lincoln, Y.S. (Eds.), *The Handbook of Qualitative Research*, 2nd edn. Sage, Thousand Oaks: CA, s.1065-1122.
- Lovric, R., Farcic, N., Miksic, S., & Vcve, A. (2020). Studying during the COVID-19 pandemic: a qualitative inductive content analysis of nursing students' perceptions and experiences. *Education Sciences*, 10(7), 188-206. <https://doi.org/10.3390/educsci10070188>
- Mancuso, J. M.(2009). Perceptions of distance education among nursing faculty members in North America. *Nursing & Health Sciences*, 11(2), 194-205. <https://doi.org/10.1111/j.1442-2018.2009.00456.x>
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis (2nd ed.)*. Thousand Oaks, CA: Sage

- Morin, K.H. (2020). Nursing education after COVID-19: Same or different?. *Journal of Clinical Nursing*, 29, 3117-3119. <https://doi.org/10.1111/jocn.15322>
- National Health Ministry, COVID-19. Retrieved December 19, 2021 from <https://covid19.saglik.gov.tr/TR-66113/covid-19.html>
- Özses, M., D'alessandro, H.D., Batuk, M., & Sennaroğlu, G. (2021). Audiology students' opinions on distance learning during the Covid-19 pandemic: experience from Hacettepe University. *Turkish Journal of Audiology and Hearing Research*, 4(1), <https://doi.org/10.34034/tjahr.23262>
- Rowe, N.C. (2004). Cheating in online student assessment: beyond plagiarism. *On-Line Journal of Distance Learning Administration* 7.
- Seidman, I. (2006). *Interviewing as Qualitative Research: A Guide For Researchers in Education and The Social Sciences*, Teachers College Press: New York.
- Suarez-Garcia, J.M., Maestro-Gonzalez, A., Zuazua-Rico, D., Sánchez-Zaballos, M., & Mosteiro-Diaz, M.P. (2018). Stressors for Spanish nursing students in clinical practice. *Nurse Education Today*, 64, 16-20. <https://doi.org/10.1016/j.nedt.2018.02.001>
- Terkeş, N., & Yamaç, S.U. (2021). Views and suggestions of nursing and midwifery students for distance education in the Covid-19 pandemic process. *Ordu University Journal of Nursing Studies*, 4(2), 240-247. <https://doi.org/10.38108/ouhcd.858820>
- Thapa, P., Bhandari, S.L., & Pathak, S. (2021). Nursing students' attitude on the practice of e-learning: A cross-sectional survey amid COVID-19 in Nepal. *PLoS One*, 16(6), 1-17. <https://doi.org/10.1371/journal.pone.0253651>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32- item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. <https://doi.org/10.1093/intqhc/mzm042>
- World Health Organization. (2020a). *Coronavirus Disease 2019 (COVID-19) Situation Report-52*. Retrieved December 19, 2021 from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200312-sitrep-52-covid-19.pdf?sfvrsn=e2bfc9c0_4
- World Health Organization. (2020b). *Coronavirus disease 2019 (COVID-19) Situation Report-66*. Retrieved December 19, 2021 from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200326-sitrep-66-covid-19.pdf?sfvrsn=81b94e61_2
- Yazıcı, H. G., & Ökten, Ç. (2022). Nursing students' clinical practices during the COVID-19 pandemic: Fear of COVID-19 and anxiety levels. *Nursing Forum*, 57(2), 298-304. <https://doi.org/10.1111/nuf.12680>