



Distance Education and Professional Perspectives of Nursing Students with the COVID-19 Pandemic

Yasemin ŞARA ¹, Ebru BEKMEZCİ ²

ABSTRACT

Aim: The implementation of nursing education with a distance education model and the aggravation of the working conditions in the clinic may affect the professional point of view of student nurses during COVID-19 pandemic. Thus, this study was conducted with a qualitative research design to investigate the reflections of COVID-19 on the distance education and professional perspective of undergraduate senior nursing students.

Material and Methods: This research was conducted with a qualitative research design based on the phenomenological approach. The sample size was determined according to data saturation, and data were collected from 20 nursing senior-level undergraduate students. The research data were collected using the Semi-Structured Qualitative Data Form prepared by the researchers. Researchers used the Colaizzi method in data analysis. The data regarding the interviews were transcribed by both researchers separately MAXQDA 11.0 qualitative data analysis software was used, and the codes, themes, and categories were determined.

Results: The themes determined from the reflections of the senior level undergraduate nursing students on distance education and professional perspectives are [1] emotional states, [2] educational life, [3] occupational readiness, and [4] opinions about the nursing profession.

Conclusion: Our study provides a deep insight into the professional perceptions, feelings, opinions, distance education experiences, and professional perspectives of distance education nursing students who will graduate during the COVID-19 pandemic. The data obtained in the present study will help nursing students identify the areas of need related to professional readiness and the difficulties in their education.

Keywords: COVID-19; distance education; nursing students.

COVID-19 Pandemisinde Hemşirelik Son Sınıf Lisans Öğrencilerinin Uzaktan Eğitim ve Mesleki Bakış Açıkları

ÖZ

Amaç: COVID-19 pandemisi sürecinde hemşirelik eğitiminin uzaktan eğitim modeli ile uygulanması ve klinikte çalışma koşullarının ağırlaşması öğrenci hemşirelerin mesleki bakış açısını etkileyebilmektedir. Bu nedenle bu çalışma, COVID-19'un hemşirelik son sınıf lisans öğrencilerinin uzaktan eğitim ve profesyonel bakış açısına yansımalarını araştırmak amacıyla nitel araştırma tasarımı ile yapılmıştır.

Gereç ve Yöntemler: Bu araştırma, fenomenolojik yaklaşımı temel alan nitel bir araştırma deseni ile gerçekleştirilmiştir. Veri doygunluğuna göre örneklem büyüklüğü belirlenmiş ve 20 hemşirelik son sınıf lisans öğrencisinden veri toplanmıştır. Araştırma verileri, araştırmacılar tarafından hazırlanan Yarı Yapılandırılmış Nitel Veri Formu kullanılarak toplanmıştır. Araştırmacılar veri analizinde Colaizzi methodunu kullanmışlardır. Görüşmelere ilişkin veriler her iki araştırmacı tarafından ayrı ayrı deşifre edilerek MAXQDA 11.0 nitel veri analiz yazılımı kullanılarak kodlar, temalar ve kategoriler belirlenmiştir.

Bulgular: Hemşirelik Son Sınıf Lisans Öğrencilerinin Uzaktan Eğitim ve Mesleki Bakış Açıklarına yansımalarından belirlenen temalar [1] duygu durumları, [2] eğitim hayatı, [3] mesleğe hazır bulunuşluk ve [4] hemşirelik mesleğine ilişkin görüşlerdir.

Sonuç: Çalışmamız, COVID-19 pandemisi sürecinde mezun olacak hemşirelik son sınıf öğrencilerinin mesleki algıları, duyguları, görüşleri, uzaktan eğitim deneyimleri ve mesleki bakış açıları hakkında derin bir fikir vermektedir. Bu çalışmada elde edilen veriler ışığında, hemşirelik öğrencilerinin mesleki hazır bulunuşlukla ilgili ihtiyaç duydukları alanları ve eğitimlerindeki zorlukları belirlemelerine yardımcı olacağı düşünülmektedir.

1 Selçuk University, Faculty of Nursing, Department of Surgical Diseases Nursing, Konya, Turkey.

2 Selçuk University, Faculty of Nursing, Department of Obstetrics and Gynecology Nursing, Konya, Turkey

Sorumlu Yazar / Corresponding Author: Ebru BEKMEZCİ , e-mail: ebru.bekmezci@selcuk.edu.tr

Geliş Tarihi / Received: 21.06.2022, Kabul Tarihi / Accepted: 12.04.2023

Anahtar Kelimeler: COVID-19; uzaktan eğitim; hemşirelik öğrencileri.

INTRODUCTION

The pandemic, named “Coronavirus disease 2019” (COVID-19) by the World Health Organization (1), was defined as a severe public health problem with high morbidity and mortality rates worldwide (2). All health professionals have had important duties during the COVID-19 pandemic, including nurses (3). The increasing workload of nurses and the aggravation of the working conditions of the nursing profession have caused nurses to be negatively affected by the pandemic (4).

The pandemic negatively affected student nurses because schools, colleges, universities, and other educational institutions were temporarily closed to prevent the spread of the virus among children and young people (5). Clinical Practice lessons were conducted with online case discussion. Care plans were requested according to the case scenarios given to the students, and the students worked in small groups and presented them online to the instructors. It was reported that, with the COVID-19 pandemic, transition to distance education and staying away from clinical practices create fear and anxiety in senior nursing students who will transition into the profession (6). The difficulty of clinical environments and caring for individuals cause student nurses to experience more anxiety in this process compared to other disciplines (7). Previous studies indicated the importance of studying the lived experience of nursing students during the COVID-19 crises, to ensure both students' safety and rigorous teaching (8, 9). According to Lovric et al. (2020), students reported mild fear of getting the infection from the classroom and high fear from the clinical setting, thus making online learning an appropriate option to lessen these fears (8). However it has been shown that nursing students find distance education and clinical and laboratory practices inadequate in many studies (10-12). They stated that distance education affects social relations as well as its effects on clinical learning (13). The academic curriculum includes training in these aspects for the development of personal and interpersonal skills such as adaptability, leadership, and ethical commitment. However, for true competence development, this knowledge must to be consolidated in practice (14).

The change in the nursing education process (15) and the aggravation of the working conditions in the clinic (16) can affect the professional perspectives of nursing students during COVID-19 (6). It is important to examine nursing students' perspectives on the profession in determining effective strategies for the challenging process created by the pandemic because while making decisions in clinical practice, nurses act in line with the basic knowledge and skills they learned during education (17). Given that COVID-19 is a severe pandemic, no relevant qualitative study is available examining the professional perspectives of undergraduate senior nursing students who will start working in the clinic soon (7, 18-20). Thus, this study was conducted with a qualitative research design to investigate the reflections of COVID-19 on the distance education and professional perspective of undergraduate senior nursing students.

MATERIAL AND METHODS

This research was conducted with a qualitative research design based on the phenomenological approach. The main reason for making it in qualitative research design was that it provides insight and perspective on the subject to be examined (21). The phenomenological approach investigates people's experiences to reveal what lies 'hidden' in them (22).

Setting and participants

The sample consisted of senior undergraduate nursing students at a university in Turkey. Participants were recruited using criterion sampling, a non-probability purposive sampling method used to collect qualitative data. This method involves selecting participants who have experienced a specific phenomenon and determining the criteria following the literature and suitable for the study. The number of participants was determined according to data saturation, and data were collected voluntarily from a total of 20 nursing students.

Inclusion and exclusion criteria in this research

Being a senior level undergraduate nursing student enrolled in a single university in Turkey, the ability to communicate ideas and experiences clearly, and to agree to participate in this research were the inclusion criteria. In contrast, the exclusion criteria were refusing to participate in this research.

Data collection tool

The research data were collected using the Semi-Structured Qualitative Data Form prepared by the researchers. Interviews were conducted between December 2020 and January 2021. The form contained 16 questions that address introductory information, opinions about the professions before and after COVID-19, reflections of COVID-19 on education life, and readiness to work after graduation. The interview content includes introductory information for the students and warm-up questions for the interview. A faster flow is provided in these parts. Participants attended the interview from their homes with their computers. Students received education completely online (Google Meet or Microsoft Teams) as the only option in the COVID-19 pandemic at the time of this study. The lecturers attended the meeting from the work offices. No one other than the participant and the lecturer was present during the interview.

Recordings are archived and will be deleted after the work is published.

Data collection

The data of this research were collected online due to the current pandemic. A study invitation was sent to the senior level undergraduate nursing students through the class representatives to the class WhatsApp group. Students who wanted to participate in this study voluntarily informed the researchers. In this study, 24 students volunteered. Two students stated that they did not want to participate in the interview later. As a result of the pilot interview with two students, the questions were reshaped. In this context, as a result of interviews with 20 people, it was understood that data saturation (i.e., no new information arising, information occurs repeatedly, and no further new coding is feasible) was reached. In this study, both researchers were competent in conducting qualitative research, took qualitative research courses, and participated in qualitative research analysis training.

Before starting the study, no relationship was established between the participants and the interviewers. For the students to express themselves freely, the date and place of the meetings were left to their preference. The interviews were video-recorded after the participants' consent. Each participant was interviewed individually for an average of 30-45 minutes using the in-depth interview technique to collect the data.

Data Analysis

The Colaizzi method of analysis includes seven steps. Researchers carefully read and examined each transcript at the first step to obtain a general sense of data transcribed using Colaizzi's analysis method. The data regarding the interviews were transcribed by both researchers separately MAXQDA 11.0 (Udo Kuckartz, Berlin, Germany) qualitative data analysis software was used, and the codes, themes, and categories were determined. Researchers determined significant statements about the phenomenon from the transcripts. These codes, themes, and categories were discussed together, reaching a consensus. To ensure rigor and to avoid discrepancies, the researchers looked over the emerging themes and subthemes, and where necessary, referred back to the transcripts to make a final judgment on themes and subthemes. The participants did not check the transcriptions and themes. However, after the interview, the answers were presented to the participants and asked if they wanted to add anything.

Ethical Aspect of this Research

The ethics committee (15.12.2020/024) and T. C. Ministry of Health Scientific Research Application Platform approvals were received for this study. Before the interviews, consent was obtained from the participating students.

Validity and Reliability

The validity and reliability of qualitative research were ensured through credibility, transferability, reliability, and verifiability (23). For reliability (consistency), the data analysis was performed by two researchers independently. After the interviews with the participants were completed, the participants' face/body expressions and video recordings were transcribed independently and without any additional comment on the meaning by the two researchers. The codes determined by both researchers were then discussed together. A purposeful sampling method was used for transferability (applicability), and homogeneity was considered. Inclusion and exclusion criteria were determined for homogeneity. The students included in the study were educated in the same class, were of similar age, and were all senior nursing undergraduates. The final version of the theme for verification was evaluated by an expert teaching qualitative research at the doctoral level and his students. Only themes and sub-themes were shared with doctoral-level experts to evaluate suitability and integrity. Data and video recordings were not shared for privacy reasons. The videos were destroyed immediately after the data was transcribed.

RESULTS

When the participants' sociodemographic characteristics were examined, the study was conducted with 15 female and 5 male students. Their average age was 21, 90% lived in the city, and 90% chose the profession willingly.

Participants answered general semi-structured questions during the interview sessions, asking for their views, feedback, understandings, and perspectives. The findings obtained in this study were analyzed using the content analysis method. As a result of the analysis, four main themes and sub-themes were formed (Table 1).

Table 1. Theme and sub-themes

1. Reflections of the COVID-19 Pandemic on the Emotional States of Nursing Students	
2. Reflections of the COVID-19 Pandemic on Education Life	2.1 Experiences of Distance Education
	2.2 Clinic Perceptions Regarding Practice Skills
	2.3 Activities for Professional Development during the COVID-19 pandemic
3. References of the COVID-19 Pandemic on Occupational Readiness	3.1 Perceptions of feeling ready for work life
	3.2 Defining Motivation to Work
	3.3 Willingness to be with Colleagues Working in the Field
4. Opinions about their Profession after COVID-19	4.1 Opinions on Changing Community Perceptions on Nursing
	4.2 Students' Changing Professional Perceptions with the COVID-19 pandemic
	4.3 Reflections of the COVID-19 Pandemic on Perspectives on Professional Associations

Reflections of the COVID-19 Pandemic on the Emotional States of Nursing Students

Nursing students included in this study expressed the reflections of the COVID-19 pandemic on their emotional states in various ways. Most nursing students have had to deal with bad emotions (upset, anxiety, fear, disappointment, incapability) during the COVID-19 pandemic. The emotional expressions of the participants were as follows:

"... I mean I feel like I am incomplete, we come there to study at a university, we are trying to do something, but now we do not leave the house and do not go to school. Education should not be like that. One part is missing, and it is upsetting." (F. 2)

They frequently stated that they were sad because they could not carry out their lessons from home effectively, could not fulfill their student roles, and experienced depression from time to time. In addition, they are afraid and sad because of the lack of skills from making clinical applications through online case discussions. One of the participants expressed this as follows:

"I only have anxiety about the future, but also my fears have started to occur. We will work directly as such as the COVID-19 pandemic. I hope this will not happen again. However, fear unavoidably arises." (M.1)

Contrary to the others, one of the students stated that he was happy because he passed higher grades in the distance education process. While the student expressed his happiness, he said it shyly and laughed. Since the students had difficulties in the online exam system in this pandemic, they passed the course with a group homework grade. Therefore, many students turned this into an opportunity.

Reflections of the COVID-19 Pandemic on Education Life

During this research, nursing education continued with distance education theoretically and practically during the pandemic. The reflections of the COVID-19 process on the educational lives of the participating students were shaped around three sub-themes. These sub-themes were experiences with distance education, their activities for professional development, and their perceptions of clinical practice skills.

Experiences of Distance Education

Concerning technical and communication problems with distance education, the participants stated that they experienced problems, such as change of study environment, the intensity of homework given instead of exams, the problem of not learning the lessons they took, unwillingness to study, and personal development. A participants' statement regarding these codes were as follows:

"Some lessons take place asynchronously. That is bad for me." (F. 11)

Students generally mentioned sharing the only computer at home with their siblings. They had to watch recorded lecture videos from their phones, which caused problems such as freezing in the video. Homework instead of exams required spending a long time in front of the computer, which triggered reluctance to study. In addition, these participants emphasized that their personal development at home was adversely affected because they could not join various student societies at the university according to their interests.

Clinic Perceptions Regarding Practice Skills

The students learned their theoretical lessons from video recordings (live lectures or recorded videos) and their practical lessons only through case analysis and discussion. The students included in the study complete clinical practice using distance education modalities for three semesters. Students expressions included the inefficiency of preparing practice lessons with case solving, the difference between doing the practices by solving cases and practicing in the hospital, forgetting the existing practice skills, and decision-making skills on the service/intensive care unit they will work. Students emphasized that they do not want to work as a nurse in the

Pediatrics and Mental Health and Diseases Department, which they implemented through distance education during the pandemic. One expression was:

"... If I were a pediatric nurse right now, I cannot. I have no idea. Even if it is a bit theoretical, there is a lot of difference with practice." (F. 3)

Activities for Professional Development during the COVID-19 pandemic

Nursing instructors continued their nursing education with registered and online videos. In addition to these, some students additionally supported their education with different activities (online courses, test books, symposiums). They utilize these activities by attending an online foreign language course, preparing for graduate exams with test books, and participating in online nursing symposiums. Some students have better understood the importance of being a better-equipped nurse during the COVID-19 pandemic. Therefore, postgraduate education requests increased during the pandemic. This was expressed as follows:

"... I was thinking about graduate education, I wanted more, I found more time to think because I wanted to improve myself. In other words, COVID-19 increased this desire." (F. 6)

References of the COVID-19 Pandemic on Occupational Readiness

The students included in the research will graduate with a portion of their education delivered via distance education and start their professional life. The expressions of the students on this subject were shaped around three sub-themes. These were the perception of feeling ready for working life, the perceptions of being with colleagues working in the field, and the identification of students' motivations for working in the COVID-19 pandemic.

Perceptions of feeling ready for work-life

Most students stated that they did not feel ready to work after graduating with distance education. This was expressed as follows:

"I forgot how to do injections, how to do a blood draw, and most of the medicines. Most importantly, I am not even sure if I will be able to contact the patient." (F.3)

Students stated that they spent a year and a half away from the hospital, so it was impossible to feel ready for business life. Students think that the hospital they will work in should give them orientation time. They emphasized that the longer this orientation period, the better their adaptation will be. In addition, two students think that nursing will be learned when they start working. A student stated that he would get used to working life quickly because he thought he had received his theoretical education well.

Defining Motivation to Work

Students stated that when they graduate and start work, their motivation to work will decrease due to negative attitudes towards health personnel in the hospital, not finding personal protective equipment, and the risks of infecting their families with viruses. This was expressed as follows:

"Right now, we see the events that happened in the COVID-19 pandemic, and we see the negative attitudes towards the healthcare personnel. We inevitably fear if such things happen to us. This decreases my motivation." (F. 2)

Some students also stated that their motivation to work would not be affected much if they started working during the pandemic.

"After the necessary precautions are taken, I want to immediately start working when I graduate. Risk is everywhere." (F. 12)

Willingness to be with Colleagues Working in the Field

After the COVID-19 outbreak in the country, the annual leave use of health professionals was canceled. That is why nurses worked nonstop in COVID-19 wards or intensive care units for months.

Nursing students participating in the study will graduate approximately in the next four months. After graduating, most of the students will start working in hospitals. The general practice in hospitals in the country is to employ new recruits in the pandemic service or intensive care unit. After completing their education, the students stated that they wanted to support their colleagues by participating in the field with them.

This was expressed as follows:

"They could not obtain permission and could not see their children. If we can start to work in the hospital, they will at least relax a bit." (E. 5)

Opinions about their Profession after COVID-19

Nursing students who participated in this study emphasized that the pandemic changed their and society's opinions about nursing and professional organizations.

Opinions on Changing Community Perceptions on Nursing

Some of the people infected with COVID-19 had to be hospitalized. They were treated in an isolated area in quarantine. Nurses gave care to these people without social distancing. These people and their relatives were grateful to the nurses. Nursing students also stated that they received feedback about these pleasing situations from the people around them (relatives, neighbors, friends). A nursing student described her dialogue with her neighbor as follows:

"My father was in the intensive care unit. He had no appetite and said he didn't want to eat. He said 'even you would give up, but the nurses encouraged me to eat without giving up.'" (F. 9)

Another student expressed a similar opinion as follows:

"In society, people have become aware of the nurses, and there were people who were thinking that nurses were just administering injections. They learned about nursing care with the pandemic." (F. 11)

Students' Changing Professional Perceptions with the COVID-19 pandemic

The participants' commitment to the profession increased with the good news on television and social media. Some students stated that the COVID-19 pandemic changed their professional thoughts in good ways:

"... I was proud of the events that happened, and for the patients who are alone in the hospital, you become their mother, father, and child. Thus, I said that I am glad that I am a nurse." (F. 2)

A few students stated that perceptions of the profession changed in a bad way because the nursing profession is at the forefront of the epidemic. These participants questioned whether or not to do this profession during the pandemic process. They questioned the nursing care given to people who do not wear masks and protect themselves.

Two of the students stated that the COVID-19 pandemic did not make any difference in their opinions about the nursing profession. One of these two students stated:

".. There was no change. Yes, I'm studying in a department on health; it's a pandemic on health. We will always do the same as we do. It is a bit more severe crisis, but this has always happened in the nursing profession." (F. 5)

Reflections of the COVID-19 Pandemic on Perspectives on Professional Associations

Many professional associations were included more on television during the pandemic. Associations announced the informative symposiums they organized on their social media accounts. Some of the students participating in this research stated that their thoughts on professional associations changed in good and bad terms during this process. Some students' thoughts did not change, whereas others stated they had new information about associations in the COVID-19 pandemic. One of the statements was as follows:

"It was affected in a better way. We could do seminars, events and so on remotely, which we could not do face to face during school time. In this sense, it was affected well." (F. 7)

They stated that the students were informed about the professional associations with the news published in this period as follows:

"I started following the intensive care nurses association when I saw it on the news. We saw that nurses could come together during the COVID-19 Pandemic." (F. 15)

In addition to these, some students emphasized that the attitude towards professional associations did not change. One student expressed this as:

"It hasn't changed much. Our associations have been with us before Covid-19." (F. 2)

DISCUSSION

This study shows that nursing students experience depression, sadness, and anxiety during the COVID-19 pandemic. Similarly Savitsky et al. (2020), (7) anxiety among nursing students was common in a study. In addition to anxiety, it has been shown that they experience negative emotions such as fear, depression, and anger (24, 25). Future studies are needed to suggest and assess the methods for reducing anxiety among nursing students.

Considering the reflections of COVID-19 on the education life of nursing students in our study, it was observed that they had difficulties in distance education. Similarly, Heilferty et al. (2021), (26) it was stated that nursing students experienced internet problems and not being able to ask questions in a study. In our study, nursing students completed their clinical practice by remote case discussion. For example, it has been observed that the nursing fundamentals course is given using Tanner's Clinical Judgment Model with virtual technology and online teaching method (27). Implementing online active learning techniques as a regular adjunct to traditional clinical practice could improve learning outcomes and transform our students into work-safe ready graduates. However, the compensation of clinical applications that cannot be done face-to-face should be done before the students graduate. Almost all nursing students stated that they felt professionally inadequate because they stayed away from clinical practices. Shah (2016), (28), thought

that pandemics of rapidly moving global new viral diseases will increase. It is thought that nurses who graduate without learning the necessary knowledge and skills may have challenges in meeting the patient care demands put forward by this new age. For this reason, nursing programs at universities should organize their plans for face-to-face applied courses given to their students through distance education in the following years. Nurses who graduate without acquiring the necessary knowledge and skills may have difficulty meeting the patient care demands of this new age. For this reason, universities should use the various possibilities of distance clinical education technology. The nursing staff must maintain a stable educational framework, provide high-quality distance learning, and encourage and support students through this challenging period.

In our study, it was found that COVID-19 nursing students are not ready for post-graduation working life. The need to prepare future nurses has never been more important than during the current global emergency. According to Masha'al et al. (2020), nursing students' professional readiness may be affected due to distance education (29). In another study in the COVID-19 pandemic, nursing students found their professional readiness insufficient (30). This study also shows that current nursing education should be reviewed to increase professional and emergency readiness among nursing students.

The participating students' views about the profession changed after the COVID-19 pandemic. This pandemic is a time of crisis and an opportunity for nursing students to reconstruct their professional identities. In one study, 30.7% of nursing students stated that the COVID-19 event made them "more passionate about clinical nursing work" and earned the highest scores for professional identity (31). Additionally, the COVID-19 pandemic may have helped nursing students understand the value of nursing as a profession that focuses on the lives of others and on being altruistic, moral, and caring. Another study stated that the COVID-19 pandemic positively contributed to students' views on the nursing profession (32).

CONCLUSION

Our study provides a deep insight into the professional perceptions, feelings, opinions, distance education experiences, and professional perspectives of distance education nursing students who will graduate during the COVID-19 pandemic. The data obtained in the present study will help nursing students identify the areas of need related to professional readiness and the difficulties in their education.

Students stated that most of their perspectives on nursing changed for the better during the pandemic. Still, their motivation to work decreased due to the epidemic. They had to cope with bad moods and difficulties in their distance education life during this time. Although they have a few months to graduate, they do not feel ready to work in hospitals while the pandemic continues.

Further studies can be conducted to investigate nursing students' (who graduated by distance education during the COVID-19 pandemic) working experiences and perspectives after starting work.

This research did not receive any specific grant from the public, commercial, or not-for-profit funding agencies.

Limitations

The limitation of this study is that it can only be transferred to similar health care and university education contexts. It will strengthen the consistency of the existing literature with the larger sample of students experiencing the investigated phenomenon.

Conflicts of interest

The authors declare that there is no conflict of interest.

Acknowledgment

The authors are grateful to all participants in this study.

Authors' Contributions: Idea/Concept: Y.Ş., E.B.; Design: Y.Ş., E.B.; Data Collection and/or Processing: Y.Ş., E.B.; Analysis and/or Interpretation: Y.Ş., E.B.; Literature Review: Y.Ş., E.B.; Writing the Article: Y.Ş., E.B.; Critical Review: Y.Ş., E.B.

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