

Perceptions and Emotions of Nursing and Health Management Students About Distance Learning During the COVID-19 Pandemic: A Qualitative Study

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ABSTRACT

Purpose: This study was conducted to determine the perceptions and emotions of nursing and health management students, who had clinical/vocational practice course, about distance learning during the COVID-19 pandemic.

Methods: Phenomenological design was employed in this qualitative study. The study was conducted with 39 full-time health sciences students in nursing and health management. Data were collected by in-depth interviews. The interviews were conducted with ten open-ended and semi-structured questions between December 2020-January 2021. Data were analyzed using content analysis.

Results: At the end of the study, it was classified into three themes and 14 sub-themes: "emotional state", "the effect of distance learning on theoretical courses" and "the effect of distance learning on clinical/vocational practice". Results have indicated that distance learning is insufficient especially in terms of clinical/vocational practices and that the emotional states of students are negatively affected.

Conclusion: It is important to use learning methods that will increase the effectiveness of psychological support and distance education during the pandemic process.

Keywords: COVID-19, distance learning, nursing students, health management students, students' emotions

COVID 19: Hemşirelik ve Sağlık Yönetimi Üniversite Öğrencilerinin Uzaktan Eğitim Algılarının ve Duygu Durumlarının Belirlenmesi: Kalitatif Bir Çalışma

ÖZET

Amaç: Çalışma, COVID-19 pandemisi sırasında uygulamalı meslek eğitimi alan hemşirelik ve sağlık yönetimi üniversite öğrencilerinin uzaktan eğitim algılarının ve duygu durumlarının belirlenmesi amacıyla gerçekleştirilmiştir.

Yöntemler: Bu kalitetaif çalışma fenomenolojik tasarımda gerçekleştirilmiştir. Çalışma tam zamanlı 39 hemşirelik ve sağlık yönetimi üniversite öğrencisi ile gerçekleştirilmiştir. Görüşmeler açık uçlu, yarı yapılandırılmış ve derinlemesine 10 görüşme sorusuyla Aralık 2020-Ocak 2021 tarihleri arasında gerçekleştirilmiştir. Elde edilen veriler içerik analizi kullanılarak analiz edilmiştir.

Bulgular: Çalışma sonunda "duygu durumu", "uzaktan eğitimin teorik derslere etkisi" ve "uzaktan eğitimin mesleki uygulamaya etkisi" olmak üzere üç tema ve 14 alt temada sınıflandırılmıştır. Uzaktan eğitimin özellikle mesleki uygulamalar açısından yetersiz kaldığı ve öğrencilerin duygu durumlarının olumsuz etkilendiği belirlenmiştir.

Sonuç: Pandemi sürecinde psikolojik desteğin ve uzaktan eğitimin etkinliğini arttıracak öğrenme yöntemlerinin kullanılması önemlidir.

Anahtar Kelimeler: COVID-19, uzaktan eğitim, hemşirelik öğrencileri, sağlık yönetimi öğrencileri, öğrencilerin duyguları

The new coronavirus (COVID-19), which emerged with the notification of pneumonia cases of unknown etiology to the World Health Organization (WHO) on December 31, 2019 in Wuhan, has affected the whole world as a global pandemic (1-3). In order to prevent the spread of COVID-19 and control it, all countries in the world have closed their borders and have gone to social isolation in line with the experiences of previous pandemics (4). This unexpected and unprepared pandemic process brought along unwanted emotions such as anxiety, fear of death, and stress (5-7). As a result, COVID-19 has been regarded as a milestone not only in the development of measures and strategies for new outbreaks, but also in the education of future healthcare professionals (8).

Especially with the COVID-19 pandemic affecting the whole world, the prominence of distance learning has increased. Although distance learning was used effectively in some universities in the world before this pandemic and had many advantages, it has also been reported that distance learning causes social isolation and interruption of student-teacher interaction (9). In particular, the inability of distance learning to replace clinical practice, negative effects such as decrease in concentration, motor skills, and self-confidence have been reported as problems of nursing students during COVID-19 pandemic (10, 11). From this point, in the current study, it is aimed to determine (a) perceptions and (b) emotions of nursing and health management students, whose clinical/vocational practice in hospitals were canceled due to the COVID-19 pandemic, about distance learning.

METHODS

Study Design

The descriptive qualitative study was carried out in phenomenological design. The qualitative method is the best data collection method used to convey individual life experiences and emotions that cannot be objectively measured. Phenomenological design is appropriate when there are very few studies describing the phenomenon in question (12, 13).

Participants and Setting

The convenience sampling method was used in this study (14). Within the scope of this study, nursing students and health management students, whose clinical/vocational practice courses were cancelled due to COVID-19, were included. Due to the lack of the distance learning experiences of freshman students, only second, third and fourth

grade students were included in the study. This qualitative study was carried out with 39 university students who voluntarily agreed to participate in the study at the faculty of health sciences of a state university in Istanbul.

Data Collection

The research data were collected with ten questions prepared by researchers based on relevant literature (15, 16) and with the support of three experts in the field (Table 2). Before starting the interviews, the pilot study was conducted with 5 randomly selected students and the interview form was finalized. Individual, in-depth, and semi-structured interviews were conducted with 39 students until new data were not available (16). All interviews were conducted in Turkish with the participation of two researchers at the same time. The interviews were conducted over the zoom application in accordance with the semi-structured interview form, with online sessions, and audio recording. The interviews lasted 45-60 minutes, an average of 51 minutes, and were held between December 2020-January 2021.

Data Analysis

Each interview was analyzed within 24 hours by two researchers who conducted the interviews. The sound recordings were first written in the native language and translated from the native language to English and back to the native language to ensure accuracy. Data were analyzed using content analysis (17). This process includes five steps: (i) multiple readings of the parsed data to obtain the main idea; (ii) line by line coding of the analyzed data; (iii) researching and defining themes; (iv) reviewing the relationships between themes; and (v) finalizing the analysis and documentation (13). In the last stage, by comparing the similarities and differences between the code groups, three themes and 14 sub-themes were reached as a result of analyses (Table 3).

Rigor and Trustworthiness

The day after the interview, each participant was asked whether the analysis of the interviews accurately reflected the truth in order to verify the reliability of the data. In addition, the qualitative content analysis results of each interview were discussed and reconsidered by the researchers every two weeks. Finally, the codes and themes of the analyzed qualitative data were verified by each participant (16, 17).

Ethical Approval

Before collection the data, Ethics Committee approval and institutional permission from the university where the study was planned were obtained. At the beginning of the interviews, the participants were informed about the study and their verbal consent was requested.

RESULTS

Three themes and 14 sub-themes were specified in the present study conducted with nursing and health management students (Table 3) (See Table 4 for more interview texts). The majority of the students interviewed were women (76.9%, $n = 23.1$), health management students (51.3%, $n = 20$), and third grade students (48.7%, $n = 19$). The average age of the students was 20.32 ± 1.09 (Table 1).

Variables		n	%
Gender	Male	9	23.1
	Female	30	76.9
Department	Nursing	19	48.7
	Health management	20	51.3
Grade	2nd class	8	20.5
	3rd class	19	48.7
	4th class	12	30.8
Age	20.32±1.09 (Minimum=19, Maximum=25)		

1. Can you briefly introduce yourself, please?
2. Which emotions did the pandemic process aroused in you? Can you tell us about your feelings?
3. How has the pandemic affected your education life? What has changed in your life? What feelings do these changes arouse in you?
4. How has the pandemic affected your social life? What has changed in your life? What feelings do these changes arouse in you?
5. How do you perceive the distance learning process? Which feelings does it arouse in you?
6. What do you think about the adequacy and effectiveness of distance learning?
7. Have you had any problems during the distance learning process?
8. Which feelings do you have when you cannot have clinical/vocational practices in hospitals, which constitute an important part of your education life?
9. Do you think you have received effective and sufficient clinical/vocational trainin with distance education?
10. Can you evaluate the effectiveness of the distance learning process for applied professions?

Themes	Subthemes	
1 Emotional state	1.1 Fear	
	1.2 Anxiety	
	1.3 Loneliness	
	1.4 Hopelessness	
	1.5 Strengthening family ties	
2 The effect of distance learning on theoretical courses	2.1 Positive affect	2.1.1 Avoid wasting time
		2.1.2 Efficient and easy learning
	2.2 Negative affect	2.2.1 Decrease in concentration
		2.2.2 Withdrawal from education, perceived as if there is no education life
3 The effect of distance learning on clinical/vocational practice	3.1 Professional inadequacy	
	3.2 Decrease in self-confidence	
	3.3 Fear of harm and making mistakes	
	3.4 Distancing from the profession	
	3.5 Decrease in motor skills	

Theme 1: Emotional State

1.1. Fear

All of the students participating in the study stated that they feared infecting their relatives during the pandemic and explained this situation with the "fear" phenomenon. Students stated that "*I am afraid... I am afraid of infecting my loved ones and my family.*" (Participant [P] 3), and "*I fear losing my relatives*" (P 18).

1.2. Anxiety

According to this phenomenon, half of the students (51.3%, $n = 20$) stated that they were worried about the uncertainty of the future. Both nursing and health management students expressed that "*I am worried whether this process will end or not, what will happen.*" (P 27), and "*I feel anxiety. Because everything is uncertain.*" (P 37).

1.3. Loneliness

All of the students participating this study stated that they did not have a social life during the pandemic process and explained this situation with the phenomenon of "loneliness". The students remarked that "*My social life is over. All my communication and sharing with my friends has decreased*" (P 2).

1.4. Hopelessness

According to this phenomenon, 35.9% (n = 14) of the students stated that they felt hopeless for the future due to the uncertainty of the pandemic process. Students reported that *"I lost my hope for the future, I am unable to plan for the future. Because I could get sick and die at any moment."* (P 11), and *"Sometimes I feel like this process will never end. I am hopeless about the future."* (P 22).

1.5. Strengthening family ties

41% (n = 16) of the students stated that they had the opportunity to spend more time with their families due to the curfews during the pandemic process. This situation was labeled as the phenomenon of "strengthening in family ties". Students expressed that *"During the restrictions on going out, my loyalty to my family increased and our family ties became stronger."* (P 15).

Theme 2: The Effect of Distance Learning on Theoretical Courses

2.1. Positive effect

2.1.1. Avoid wasting time

According to this phenomenon, all of the students participating in the study stated that they saved time with distance learning. Students reported that *"In this process, I can easily access everything from home, without wasting time and without getting tired. All I have to do is turn on my computer and enter class."* (P 2).

2.1.2. Efficient and easy learning

One-fourth of the students (25.6%, n = 10) explained the distance learning in terms of theoretical courses with the phenomenon of "effective and easy learning". Students stated that *"Distance learning is efficient and effective for the theoretical courses"* (P 38).

2.2. Negative effect

2.2.1. Decrease in concentration

The majority of students participating in the study (74.4%, n = 29) explained distance learning with the phenomenon of "decrease in concentration". Students expressed their opinions as: *"In the distance learning process, you are not alone at home. My mother can enter the room suddenly during the lesson. My concentration on the lecture can get disrupted."* (P 10).

2.2.2. Withdrawal from education, perceived as if there is no education life

More than a quarter of the students (30.8%, n = 12) explained distance learning with the phenomenon of "withdrawal from education, perceived as if there is no educational life". Students stated that *"I feel like I don't have any education life with distance learning, as if I am not a university student at all."* (P 8).

Theme 3: The Effect of Distance Learning on Clinical/Vocational Practice

3.1. Professional inadequacy

All of the nursing students and 35% (n = 7) of the health management students explained their inability to perform their clinical/vocational practices in the hospital with the "professional inadequacy" phenomenon: *"Right now I feel professionally inadequate. Because my profession is based on practice and I will actually learn in a hospital environment. We were not able to practice in clinics during this period, so I feel like I have forgotten even the clinical practices I have learned."* (P 3).

3.2. Decrease in self-confidence

Half (52.6%, n = 10) of the nursing students participating in the study and one fifth (20%, n = 4) of the health management students explained the situation of not being able to practice in hospitals with the phenomenon of "decrease in self-confidence". Students stated that *"In-person placement of clinical practice before the pandemic was a chance to gain a lot of experience. I had self-confidence. But now I have no self-esteem. I feel like a newborn baby."* (P 1).

3.3. Fear of harm and making mistakes

More than half of the nursing students (63.2%, n = 12) explained their inability of clinical practice during COVID-19 pandemic with the phenomenon of "fear of harm, making mistakes". None of the health management students mentioned this phenomenon. Nursing students stated that *"I think I will do more harm than good to the patient."* (Participant 6).

3.4. Distancing from profession

While, half of the nursing students (52.6%, n = 10) explained their inability of clinical practice during COVID-19 pandemic with the phenomenon of "distancing from the profession", none of the health management students mentioned this phenomenon. Nursing students expressed that *"Not being able to have clinical practices distanced me from my profession. I feel like I am not trained in this profession adequately."* (Participant 39)

Table 4: Interview texts	
Themes and subthemes	Interview texts
Theme 1 Emotional state	
1.1. Fear	"I feel an intense fear. Will anything happen to my family? I am afraid that I will infect someone with a disease or how I will overcome this process." (Participant 35)
1.2. Anxiety	It is not clear when the pandemic will end, it is not clear when the schools will open, it is not clear whether I can do an internship or not." (Participant 31)
1.3. Loneliness	"I forgot what it feels like to socialize, how to behave outside, how to communicate. I can say I became lonely. I feel like I'm in jail" (Participant 6) "I continue my communication on social media, but I cannot convey my feelings, touch, hug. I feel that I am lonely." (Participant 19)
1.4. Hopelessness	"The prolongation and uncertainty of the pandemic increases my despair. Will the situation get worse, will I never see my friends again, never go to school again? My motivation also vanished. I want to do something, but I don't feel like doing anything." (Participant 26)
1.5. Strengthening family ties	"During this period, I had the opportunity to spend more time with my family. Our family relations were positively affected because we all had the chance to get away from work and school life and spend more time with each other." (Participant 34).
Theme 2: The Effect of Distance Learning on Theoretical Courses	
2.1. Positive effect	
2.1.1. Avoid wasting time	"My time was left for me during the distance learning process. The time it took to reach the school was left to me. I even got a chance to wake up 5 minutes before the lesson and join the lesson." (Participant 14).
2.1.2. Efficient and easy learning	"Distance learning should be continued in terms of theoretically taken courses." (Participant 23).
2.2. Negative effect	
2.2.1. Decrease in concentration	"The facial expressions, gestures and eye contact of the person lecturing the lesson are very important to me. Although I try to focus and understand the lesson by looking at the computer screen in distance learning, after a while my concentration on the lesson comes to an end. I can fall asleep in front of the computer." (Participant 33). "It is impossible to try to understand the lesson or to focus on the lesson by looking at the computer screen in distance learning. After a certain time, my concentration and motivation in the lesson disappears completely, I feel sleepy. I cannot feel myself in the school environment." (Participant 20)
2.2.2. Withdrawal from education, perceived as if there is no education life	"I do not feel that I am getting education with distance learning. I attend the class but I don't feel like I am at school. My family life and responsibilities are intertwined with my school life. I feel like I am withdrawal from education life." (Participant 30) "My family perceives distance learning as if I don't have an education life because I don't go to school." (Participant 39)
Theme 3: The Effect of Distance Learning on Clinical/Vocational Practice	
3.1. Professional inadequacy	"I feel both helpless and inadequate because my professional experience is not sufficient. How can I provide nursing care without clinical experience? I do not want to be on the field with this inadequacy. Nor do I think I can be effective due to lack of experience. I feel useless." (Participant 19) "Not being able to do clinical practice makes me feel like a fish out of the water and creates occupational inadequacy. Because I think that learning by training in a hospital environment is much more effective than the theoretical training I received." (Participant 12) "Not being able to practice at hospitals does not cause occupational inadequacy for me. Because I believe that an individual's professional competencies develop with his/her own individual effort rather than vocational practice courses." (Participant 9)
3.2. Decrease in self-confidence	"Not being able to practice in hospitals reduced my self-confidence. Because I am afraid. I'm afraid of not being sure what I'm doing is right or wrong." (Participant 2) "Staying away from the practice field caused my professional practices that I knew before to become blunt. My self-confidence has decreased." (Participant 7)
3.3. Fear of harm and making mistakes	"Not being able to practice in clinics causes a very high sense of harming the patient." (Participant 4) "We cannot practice in clinics. This makes me worry about professional inadequacy and harm to the patient. Even before the pandemic, I was afraid of harming someone else, which I feel more intensely now." (Participant 33)
3.4. Distancing from profession	"I feel like I'm still studying mathematics and physics like a high school student, not nursing. I feel that I am distanced from my profession and cannot integrate with my profession." (Participant 5) "I do not want to do the nursing profession with the feeling of inadequacy and insecurity, I do not want to be in the practice field. Although I love this job very much, the feeling of professional inadequacy and fear keeps me away from my job." (Participant 20).
3.5. Decrease in motor skills	Nursing is an applied profession, however, I was unable to have clinical practice and I did not have the opportunity to transition of my theoretical knowledge into the practice field, which led to a decrease in my hand skills" (Participant 34).

3.5. Decrease in motor skills

One fourth of the nursing students participating in the study (26.3%, n = 5) explained their inability of clinical practice with the phenomenon of "decrease in motor skills". None of the health management students mentioned this phenomenon. Nursing students stated that *"I may have theoretical knowledge to communicate with the patient, but not being able to practice reduced my professional skills."* (P 38).

DISCUSSION

Theme 1: Emotional State

In order to prevent the high transmission rate of COVID-19, which affects the whole world and enters our lives suddenly, or the possibility of transmission from asymptomatic carriers, all countries in the world have implemented measures, such as social isolation, work from home and distance learning (4). In this process, many studies have reported that individuals experience anxieties such as fear of getting sick, fear of death, fear of losing their relatives, feeling lonely with social isolation, uncertainty of the future, stress, burnout and sleep disorders (5-7, 18). These studies support the finding of current study. It was also emphasized that it is important to support university students in health-related professions psychologically (19). According to the finding of the present study, on one hand the pandemic increases negative emotions such as fear, anxiety, loneliness and hopelessness in students, on the other hand it leads strengthening of family ties.

Theme 2: The Effect of Distance Learning on Theoretical Courses

Supporting the finding of current study, it was reported that many universities in the world preferred distance learning before the pandemic as an effective teaching method due to its ease of use and flexibility (9). For instance, in a study investigating the effectiveness of distance learning during the pandemic process, it was determined that the majority of university students prefer to learn face-to-face compared to distance learning and that students are not yet ready for distance learning. In addition, the study emphasized the importance of student-teacher interaction (10). Again, in another study, which is in line with the finding of present study, it was reported that during the COVID-19 pandemic, nursing students experienced lack of motivation, concentration impairment, forgetfulness, and had difficulty learning (11). In addition, Al-Rabiaah et al. (20) have indicated that the students in health-related professions frequently experience decreased psychomotor concentration and learning difficulties during this

pandemic, and this situation negatively affects the academic success of students.

Theme 3: The Effect of Distance Learning on Clinical/Vocational Practice

It has been stated that there are many challenges in the continuation of the education for applied professions, that directly touch the patient, at the universities (15, 21). It is also argued whether the clinical placement of students should be continued or cancelled (21). In line with the current study, in many studies, it is reported that university students in health-related departments feel lack of practical competencies during the COVID-19 pandemic (15, 22, 23). In the current study, in terms of clinical/vocational practices, nursing students felt more professional incompetence, fear of harm, fear of making mistakes, distancing from the profession, decrease in self-confidence and motor skills compared to health management students. Therefore, it can be inferred that the difference in perceptions and emotions about distance learning between nursing and health management students may arise from contacting the patient directly or indirectly.

Limitations

Conducting the study in a single country, city and institution prevents the results from being generalized. Therefore, the results can only be generalized to countries in a similar region and culture.

CONCLUSION

As a result of the study, it is found that nursing and health management students feel intensely fear during the pandemic process, anxiety and hopelessness, become socially isolated, but their family ties are strengthened. When the effect of distance learning on professional practice is evaluated, it is observed that, compared to health management students, the majority of nursing students feel a decrease in professional inadequacy and self-confidence. According to the results of this study, it is strongly recommended that:

- Psychological support for nursing and health management students' emotional states during the pandemic process,
- Using learning methods that will increase the effectiveness of theoretical education in the distance learning process,

- Completing the missing clinical practices of nursing students, especially those who directly touch the patients.

DECLARATIONS

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The authors declare no conflicts of interest

Conflicts of Interest

The authors declare no conflict of interest.

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Ethical Approval

Before collection the data, Social and Humanities Research and Publication Ethics Committee approval (Date: 27.10.2020, No: 2020/35) and institutional permission from the university where the study was planned (Number: 70734980-605-E.21851, Date: 30.11.2020) were obtained.

Author Contributions

Designed the study: RT, SS. Collected data: RT, SS. Analyzed data: RT, SS. Supervised the analysis: RT, SS. Contributed to interpretation of findings: RT, SS. Drafted the paper: RT, SS. Critical review providing important intellectual content: RT, SS. All authors have approved the final version of the paper.

Availability of Data and Materials

All data have deposited in a repository.

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