

Difficulties experienced by nursing students and their perception of the profession during the COVID-19 pandemic: A qualitative research*

Covid-19 salgın döneminde hemşirelik öğrencilerinin yaşadıkları güçlükler ve meslek algısı: Nitel araştırma

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*This article International Covid -19 Congress on June 2020 in Ankara, Turkey was given a presentation. Oral Presentation

ABSTRACT

Objective: Nursing students faced the difficulties of being locked in their homes due to the pandemic in the first year of their career. Both the fact that their profession is taken into consideration and their sudden closure causes some difficulties. This study aimed to investigate the difficulties experienced by first-year nursing students, who were isolated at home during the COVID-19 pandemic in Turkey and observed the process from home, and their perceptions and thoughts regarding the nursing profession. **Method:** The study used a qualitative research design. The sample of the study consisted of a total of 16 first-year nursing students who were enrolled at a foundation university and voluntarily participated in the study. The responses of the students were assessed with content analysis by considering the frequency of the comments, the number of participants who made the same comments, the number of participants who used the same words, what the responder wants to say, and the originality of the response. **Result:** As a result of the content analysis, five main themes, namely problems experienced during COVID-19 pandemic, coping with problems, increased awareness, perception of the nursing profession, and making friends with COVID-19, and eleven sub-themes were obtained. **Conclusion:** The first-year nursing students were initially found to experience mental and social problems during the pandemic process. However, it turned out that they gained experience in positive thinking to cope with these problems and that their feelings and thoughts towards their profession were positively affected.

ÖZ

Amaç: Hemşirelik öğrencileri, kariyerlerinin ilk yılında pandemi nedeniyle evlerine kapanmanın zorluklarıyla karşılaştı. Hem mesleklerinin dikkate alınması hem de aniden kapanmaları bazı zorluklara neden oluyor. Bu çalışmada, Türkiye’de COVID-19 pandemisi sürecinde evde izole olan ve süreci evden gözlemleyen hemşirelik birinci sınıf öğrencilerinin yaşadıkları güçlükler ile hemşirelik mesleğine ilişkin algı ve düşüncelerinin araştırılması amaçlanmıştır. **Yöntem:** Çalışmada nitel araştırma deseni kullanılmıştır. Araştırmanın örneklemini bir vakıf üniversitesinde öğrenim gören ve araştırmaya gönüllü olarak katılan toplam 16 birinci sınıf hemşirelik öğrencisi oluşturmaktadır. Öğrencilerin cevapları, yorumların sıklığı, aynı yorumu yapan katılımcı sayısı, aynı kelimeleri kullanan katılımcı sayısı, cevaplayanın ne demek istediği ve orijinalliği dikkate alınarak içerik analizi ile değerlendirilmiştir. **Bulgular:** İçerik analizi sonucunda COVID-19 pandemisinde yaşanan sorunlar, sorunlarla başa çıkma, farkındalık artışı, hemşirelik mesleği algısı ve COVID-19 ile arkadaş olma olmak üzere beş ana tema ve on bir alt tema elde edilmiştir. **Sonuç:** Hemşirelik birinci sınıf öğrencilerinin pandemi sürecinde başlangıçta ruhsal ve sosyal sorunlar yaşadıkları saptanmıştır. Ancak bu sorunlarla baş edebilmek için olumlu düşünme konusunda deneyim kazandıkları ve mesleklerine yönelik duygu ve düşüncelerinin olumlu yönde etkilendiği ortaya çıkmıştır.

INTRODUCTION

The novel coronavirus (COVID-19) has rapidly spread to China and many other countries and caused an acute pandemic of infectious pneumonia (Bao et al., 2020). The pandemic has caused not only a risk of viral infection-associated morbidity but also an intolerable psychological pressure on people (Xiao, 2020). The increase in the number of patients and suspected cases, as well as the number of provinces and countries affected by the pandemic, has also resulted in increased

public anxiety (Bao et al., 2020). Also, sensational and inaccurate news reports, in addition to having to use protective materials, such as masks and disinfectants, have escalated anxiety and fears (Ayittey et al., 2020).

One of the measures taken with the emergence of the first case in Turkey in March 2020 was the suspension of face-to-face education at universities. During this period, universities started to use distance education opportunities to continue education (Can, 2020). It is known that problems threatening public health can

cause many psychological effects on university students, such as anxiety, fear, and concerns (Mei et al., 2011; Thompson et al. 2016). University students' anxiety about the pandemic, place of residence, family income, whether they live with parents, whether a relative or acquaintance is infected with COVID-19, and their anxiety about future lead to problems in their daily and academic lives (Moreno et al., 2019; Chen et al., 2020; Wang et al., 2020). People living in urban areas are more advantageous in accessing economic, educational, and cultural resources compared to those living in rural areas and have less anxiety accordingly (Shigemura et al., 2020). On the other hand, students' anxiety may arise from the increasing distances between people due to quarantine (Xiao, 2020; Kmietowicz et al., 2020).

With the rapid spread of COVID-19, healthcare personnel may become inefficient in the face of the ever-increasing number of patients and workload. During this pandemic process, where the management systems of societies and countries have been caught unprepared, healthcare workers, too, often feel inadequate and vulnerable. This sense of inadequacy and vulnerability stems from the lack of scientific information about the disease, the lack of protective materials that healthcare personnel need to use, the risk of catching or transmitting the disease, and being perceived by others as a threat in terms of carrying and transmitting the disease (Schwartz et al., 2020). Nurses are the healthcare workers who most often get in contact and spend time with patients compared to others. They experience intense stress as they are at risk when performing treatment and care (Mason et al., 2020; Lai et al., 2020).

In this study, the problems experienced by first-year nursing students, who had to live isolated at home during the COVID-19 pandemic process in Turkey, and their perceptions of the nursing profession were addressed.

MATERIAL AND METHODS

This study used a qualitative research design. In qualitative research, research questions, sample selection, data collection, and data analysis are different from quantitative research. Data collected in a qualitative study cannot be reduced to numbers as in quantitative studies. Instead, the main goal is to provide the reader with an explanatory and realistic situation on the subject (Streubert Carpenter, 1999).

Participants and setting

The universe of the study consisted of 42 students enrolled in the nursing department of a foundation university. The purposive sampling method was used in the study (Streubert Carpenter, 1999). According to Goss

and Leinbach (1996), a sample size of 15 individuals is adequate to conduct the study. Therefore, based on the purposive sampling method, the study sample consisted of 16 first-year students who volunteered to participate in the study.

Data Collection

The students were asked to provide detailed written answers to the six open-ended questions to collect the qualitative data. For this purpose, a semi-structured questionnaire and a student information form were sent to the students by email as data collection tools, and they were asked to answer the questions on the data forms completely. The students who accepted to participate in the study were informed about the study and asked to write detailed answers to the open-ended questions on the questionnaire and to send their responses as a text to the researcher via email. The information obtained from the texts sent by the students was recorded and kept confidential.

The participants were asked the following questions

1. What problems have you had the most in the past month? Which of these problems is the most important? What would you like to say about this?
2. How have you coped with these problems?
3. What has changed in your life in the past month? Can you talk about them?
4. Has there been a change in your thoughts about your profession during the last month?
5. Have you changed your perspective on nursing care? Can you explain it?
6. What would you like to say to corona if it were a friend of yours? Can you explain briefly?

Data Analysis

The raw data written by the students were read and grouped. During the qualitative analysis of the data, a content analysis was conducted considering the content of the answers given by the students, the frequency of comments, and the number of students using the same comments and the same words. Students' responses to each question were evaluated separately. Similar or different answers given by students were grouped. The raw data were read and coded, and then they were classified to create themes. The codes and themes were submitted to the opinion of a specialist who had similar studies (Kümbetoğlu, 2005; Streubert & Carpenter, 1999). The data were rearranged under the expert opinion, and the final form of the data was obtained. In light of the data obtained from the study, 5 main themes

and 11 sub-themes were created (Table 1). COREQ was used in run control.

Ethical considerations

At the outset, written approval of the ethics committee of University was obtained (FBU / 2020-007). Also, the verbal consent of the participants was obtained after they were given information about the research. During data analysis, participants' names were coded using letters and numbers. The themes and sub-themes generated in the study were shared with the participants, and their verbal consent was obtained.

RESULTS

A total of 16 students were included in this research. The students were observed to answer the questions sincerely. According to the findings, the mean age of the students was 20.125 years (min.: 18, max.: 29), 75% were female, 75% were general high school graduates, 12.5% had graduated from another university before, 62.5% had social security, and 62.5% lived in a city.

Theme 1. Problems experienced during the COVID-19 pandemic

The students stated that they had problems during the COVID-19 pandemic and that the most common problems were “restriction of freedom” and “fear of death”.

Sub-theme 1. Restriction of freedom (K1, K4, K5, K7, K9, K13, K14, K15, and K16)

More than half of the students stated that their freedom was restricted due to their isolation at home during the COVID-19 pandemic in the past month. The responses of some students on this subject are as follows:

“Depression, a pessimistic mood, and a sort of burnout syndrome are among the most common problems I’ve had in the past month. I am at home due to the pandemic that

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has been effective worldwide for more than two months; the whole family is at home, and now I am feeling worse every other day. Not being able to move freely and to do what I want, fear of death, and the fear that something bad will happen to my loved ones are putting me down day by day.” (K4)

“I have been trying to cope with psychological problems most for the past month because COVID-19 has worn me down, disrupting my established order and life course.” (K7)

Sub-theme 2. Fear of death (K1, K2, K3, K4, K5, K7, K9, K13, and K15)

More than half of the students stated that they experienced fear of death due to the COVID-19 pandemic. The answers of some students on this subject are as follows:

“Unfortunately, many people have died of the new type of coronavirus (COVID-19) that appeared a few months ago. It has also affected us psychologically and sociologically. Unfortunately, we get news of death every day. This has impacted me a lot. My friend’s mother died unexpectedly. Hearing too much news of death has recently influenced me a lot inevitably.” (K3)

Theme 2. Coping with problems

Students stated that they coped with the problems by “positive thinking” and “practicing what they learned at school” during the COVID-19 pandemic period.

Sub-theme 3. Positive thinking (K1, K2, K7, K8, K9, K11, K12, K13, and K14)

More than half of the students stated that they thought positively to cope with the problems they experienced during the COVID-19 pandemic. Some student responses on this subject are as follows:

“I have conditioned myself to fulfill my responsibilities so that I will not waste my free time during this process; I

Table 1. Main and Sub-themes

Main themes	Sub-themes
Problems experienced during Covid-19 pandemic	Restriction of freedom Fear of death
Coping with problems	Positive thinking Applying things learned at school
Increased awareness	Understanding the value of life Development of new skills
Perception of the nursing profession	A respectable profession The righteousness of the decision Love of the profession
Making friends with Covid-19	It should leave humankind alone. We need to call it to account.

am trying to create a more positive environment by also inspiring people around me.” (K7)

“I’m listening to myself. According to my religious belief, I think there is goodness in everything; I believe in this philosophy, and I am instilling expectations in myself again.” (K12)

“Still, we need to see the beautiful side of life. My mother says, ‘if you always have a positive view of life, then everything will be beautiful.’ I want to see everything beautiful and everything to look really nice; to see beautiful days.” (K14)

Sub-theme 4. Applying what they have learned at school (K1, K2, K5, K9, K11, K12, K13, and K14)

Half of the students stated that the way to deal with problems was to apply what they learned at school. Some of the responses in this regard are as follows:

“The way I cope is to be more careful, to better grasp the importance of the issue and behave accordingly, and to implement some of the things that I have learned in my department in that short time.” (K5)

“I’m thinking about what I have learned at school, and I’m trying to apply them. This makes me feel comfortable.” (K11)

Theme 3. Increased awareness

When students were asked whether there had been a change in their lives in the past month during the COVID-19 pandemic period, they stated that their awareness of “understanding the value of life” and “developing new skills” increased.

Sub-theme 5. Understanding the value of life (K2, K3, K4, K6, K8, K9, K10, and K13)

Half of the students stated that their awareness of understanding the value of life increased during the COVID-19 pandemic process. Some of the student responses to this topic are as follows:

“I have remembered again that it is uncertain when life will end, and therefore I have thought I should show more interest in people I love because sometimes it might be too late for it.” (K2)

“I can say that almost everything has changed in my life in the last one or two months. My whole routine and lifestyle have changed. In this process, I have realized that I did not know the value of many things before the pandemic. To give a simple example, going out to the beach and drinking a coffee or tea somewhere fearlessly and freely used to seem a very ordinary routine to me. But I have realized that even this simple thing was a great luxury in our lives.” (K4)

Sub-theme 6. Developing new skills (K1, K3, K4, K6, K9, K12, K14, K15, and K16)

More than half of the students stated that they realized they developed new skills during the COVID-19 pandemic. Some of the student responses on this subject are as follows:

“In fact, everything has changed in my life in the past month. The city where I live, my environment, even my behaviors have changed. I feel I have become introverted, and the good news is that I am busy with some things I have postponed. I have taken up new hobbies.” (K12)

“I can say that my whole life has changed. I have had the opportunity to do activities that I could not spare time. I have started doing sports. I have read many books and learned to cook.” (K15)

Theme 4. Perception of the nursing Profession

When the students were asked how their perception of the nursing profession was influenced by the fact that the nurses were at the forefront during the COVID-19 pandemic period as they were about to take their first steps into the nursing profession their expressions were found to gather under “a respectable profession”, “righteousness of the decision” and “love of the profession” sub-themes.

Sub-theme 7. A respectable profession (K3, K5, K6, K7, K8, K9, K14, K15, and K16)

More than half of the students stated that they regarded nursing as a respected profession during the COVID-19 pandemic. The answers of some students on this subject are as follows:

“I have realized how sacred my job is. Yes, I have been aware of its importance, but witnessing it in this way has strengthened my opinion a lot. Of course, I have also felt fears. But I have always dreamed of devoting myself to something in my life. Thinking that this is perhaps my profession, I can say that my attachment to my profession has strengthened.” (K6)

“Once again, I have understood the advantage of choosing the profession for the past month. The whole society has understood that we help people, we touch their lives, and I am very happy that their respect for this profession has increased more.” (K14)

Sub-theme 8. Righteousness of the decision (K1, K2, K4, K11, K13, K12, K14, and K16)

Half of the students were found to perceive that their decision to choose nursing as a profession was correct especially during the COVID-19 pandemic. The answers of some students on this subject are as follows:

"I have chosen this profession to get the prayers of a person because it touches human life. Every profession that touches human life and gives life to people is sacred to me. In this process, I have better understood that my profession is sacred and that I have really wanted this profession." (K4)

"Once again, I understand that I have made a very correct decision. I understand better how important nursing is and that it is a sacred profession." (K14)

Sub-theme 9. Love of the profession (K1, K3, K5, K6, K7, K8, K9, K10, K12, K14, K15, and K16)

The majority of the students stated that their love for the nursing profession increased even more during the COVID-19 pandemic. The responses of the students in this regard are as follows:

"I have actually loved the nursing profession, but during this period, my love and respect have increased even more. Once again, I understand how valuable and important this profession is." (K1)

"I am a person who is in love with this profession. Nursing was one of my childhood dreams. During this process, I have seen the righteousness of my decision. 'Fortunately', I said, 'I have chosen this sacred profession.' Of course, 'I wish', I said, 'I wish I was working as a nurse right now. I wish I could be there to make the most difficult and desperate moments of those people beautiful, support them, and satisfy their longing for their families.' I hope that all humanity will never face such a challenge again. If we ever happen to experience such a pandemic in the future, I will fight at the forefront again without any regrets." (K12)

Theme 5. Making friends with the corona

When the students were asked what they would say to the corona if they were friends, they responded as "leaving humanity alone" and "calling it to account."

Sub-theme 10. Leave humanity alone (K1, K3, K4, K8, K9, K11, K12, and K14)

Half of the students were found to tell the corona to leave them alone in case of their friendship with corona. Some of the student responses are as follows:

"I would say, 'please, leave us alone'. So, I think the whole world now wants it like me." (K1)

"Hey Corona, you have infected enough people and made them sick. Now, disappear from this world without harming people anymore and let us hug our loved ones in a peaceful environment. You have raised people's awareness and given them a lesson, now it's time you went, my friend." (K8)

"I would like it to leave immediately. I would say that it has hurt people, ruined the economy and states, and killed the elderly and those with chronic diseases. 'Haven't you ever been upset while doing these?', I would ask. I would tell it to leave all of humanity alone." (K12)

Sub-theme 11. Calling it to account (K1, K3, K6, K7, K9, K10, K12, K13, and K16)

Most of the students stated that in case of their friendship with corona they would call it to account. Some of the student responses in this regard are as follows:

"If corona were my friend, I would ask it a lot of questions. Probably the most important of these questions would be 'WHY?' 'Why have you made us experience all these?'" (K12)

"I would say, 'Let's finish our friendship as soon as possible. Haven't all these been enough?'" (K13)

DISCUSSION

In this study, the feelings and thoughts of first-year nursing students were investigated to find out about the difficulties caused by their isolation at home during the COVID-19 pandemic and their perceptions about the nursing profession. The lack of studies on these issues restricts the discussion section.

In our study, students stated that they experienced some problems during the COVID-19 pandemic and that the most common problems were "restriction of freedom" and "fear of death". Kürtüncü et al. (2020) stated that most of the students had difficulties in coping with anxiety, stress, and emotions during the COVID-19 pandemic and could not follow the lessons. The infection of family members with coronavirus affected the psychology of the students negatively. Acharya (2020) stated that students' freedoms were restricted due to COVID-19, and therefore they had more stress and that their stress continued to increase gradually as the time extended. In their cross-sectional study on COVID-19 with nursing students in Israel, Savitsky et al. (2020) found that students' anxiety was high due to social isolation, economic instability, uncertainty about the future, difficulties brought by distance education, and fear of being infected. In this study, students' expressions of fear of death suggested that they were under more stress.

The students in our study stated that they coped with the problems during the COVID-19 pandemic with "positive thinking" and "applying what they have learned at school" (Theme 2). İkhag et al. (2020) stated that more than 80% of nursing students showed positive attitudes during the COVID-19 period. White et al. (2020) stated that during the MERS epidemic, more

than 50% of health sciences students exhibited positive attitudes towards protection from the epidemic. Savitsky et al. (2020) stated that those with high self-esteem could make positive and active attempts to cope with stress. In the same study, they stated that there was a significant correlation between positive coping style and self-esteem, and that, at the same time, religious belief had a positive effect on dealing with various stress factors, such as disease, loss of a child, terrorism, and war. In the present study, students' knowledge levels and positive perspectives were thought to be effective in coping with the pandemic.

In our study, the students stated that their awareness of "understanding the value of the life" and "development of new skills" increased in the last month during the COVID-19 pandemic (Theme 3). COVID-19 pandemic has changed our view of many things worldwide. Pandemic has brought about a lot of stress to the nursing workforce in many parts of the world (Hayter et al., 2020). In a study on hospital staff who were likely to contact SARS, immediately after the quarantine period (9 days) ended, these people were found to exhibit burnout, anxiety, anger, nervousness, insomnia, stress, depression, self-blame, impaired concentration, and instability, and it was reported that these traumatic symptoms could be seen even after three years. Some studies in the literature state that these symptoms can be eliminated by applying some non-pharmacological treatment methods, such as physical exercise and dance (Viana et al., 2020). However, since people have been unable to access exercise facilities or to exercise outdoors during this period, home-based exercise training has been noted to be important to both maintain physical fitness and provide long-term commitment to exercise and to facilitate coping with symptoms (Viana et al. 2020). It is thought that the pandemic may have enabled nursing students to understand the value of life, to perform activities they could not spare time before, and to develop new skills.

In the present study, when the students were asked how their perception of the nursing profession was influenced by the fact that the nurses were at the forefront during the COVID-19 pandemic period as they were about to take their first steps into the nursing profession their expressions were found to gather under "a respectable profession", "righteousness of the decision" and "love of the profession" sub-themes (Theme 4).

One of the most important occupational groups in the provision of healthcare is the nursing profession. Nursing has critical responsibilities, such as protection and promotion of health and healing at the time of illness. To fulfill their responsibilities, nurses need to choose the nursing profession voluntarily, to maintain the prestige

of the profession in the society, and to strive to serve the profession by applying the knowledge and skills learned during the education life in the best way (Tercan et al. 2017). Tan et al. (2007) reported that 16% of the students evaluated nursing as a prestigious profession. Karakurt et al. (2017) found that while students defined the nursing profession, 18.9% stated that nursing was a respected profession. Kardaş Özdemir and Şahin (2016) found the factors affecting the students' choice of the nursing profession as the social prestige of the profession in society and its professional autonomy. The sustainability of the profession, the opportunities it provides, economic factors, social respect, health, and security in terms of social welfare are the leading factors in the choice of the profession. In the present study, students were found to see nursing as a prestigious profession. News and information students received from media and social networking sites during the COVID-19 pandemic might affect their career decisions that they previously made (Kirti et al. 2020). Kirti et al. (2020) found that students showed positive attitudes toward the nursing profession.

During the pandemic, while negative emotions in the early period and dominant positive emotions show up gradually, self-coping styles and psychologically more positive moods start forming (Zhi et al., 2020; Dewart et al., 2020). In our study, the students stated that they had made the right decision about their choice of the profession and that they were satisfied with their choice.

For students to be successful in their future professional life, they must know, accept, and love their profession during education. Kardaş Özdemir and Şahin (2016) stated that 58.4% of first-year nursing students loved their professions. In the present study, the students stated that they loved their profession.

When students were asked what they would like to say to corona if they were friends with it, their statements were observed to gather under "leaving humanity alone" and "calling it to account" themes. Bursts of anger, thoughts and attempts of self-mutilation, and attempts to escape from quarantine can be observed during quarantines exercised due to pandemics. While evaluating the possible benefits of mandatory quarantine practices, it is also necessary to consider the negative mental consequences that may arise. Everyone in our country, as well as the rest of the world, wants this pandemic, which restricts life extremely, to end as soon as possible. Besides COVID-19 patients, hundreds of thousands of patients who try to cope with other diseases are uneasy and victimized. Millions of people, especially those who make a living in daily jobs, try to cope with social and mental problems along with economic problems. All these grounds create a great expectation that the restrictions stemming from the COVID-19 pandemic

will be lifted, and life will recover (Turkish Medical Association COVID-19 Advisory and Monitoring Board Report, 2020). In the present study, students developed an attitude, not only for themselves but also for the whole society, asking the COVID-19 pandemic to end as soon as possible, to leave people alone, and to call it to account for the destruction it caused.

CONCLUSIONS

This study revealed that first-year nursing students experienced mainly mental and social problems during the Covid-19 pandemic. However, to cope with these problems emotionally, it was determined that they gained experience in positive thinking and applied what they learned during their education and that their feelings and thoughts about their profession were positively affected.

In light of these results, we recommend that nursing students should be supported by their counselors at university in solving their mental and social problems, they should be provided with psychological support in coping with stress, and that they should be strengthened personally for possible pandemic processes.

First-year students studying in the nursing department experienced mental and social problems during the pandemic process. They tried to cope with these problems by thinking positively and taking different occupations. His feelings and thoughts about the nursing angel were also more positively affected.

Limitations

The results of this study are that nursing students may differ depending on the region they live in and the culture. Study results cannot be generalized as country conditions will vary.

Use of Results in Practice

First-year students studying in the nursing department experienced mental and social problems during the pandemic process. They tried to cope with these problems by thinking positively and taking different occupations. His feelings and thoughts about the nursing angel were also more positively affected.

REFERENCES

Acharya, S., (2020). Stress in the student safter lock down due to outbreak of coronavirus (COVID-19) (May 15, 2020).
Ayithey, F.K., Ayithey, M.K., Chiwero, N.B., Kamasah, J.S., Dzuvoor, C., (2020). Economic impacts of Wuhan 2019-nCoV on China and the world. *J Med Virol*, 92(5),473-475.
Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-n CoV epidemic: address mental Health care toem power society. *Lancet*, 395 (10224), e37–e38.

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Can, E. (2020). Coronavirüs (Covid-19) pandemisi ve pedagojik yansımaları: Türkiye’de açık ve uzaktan eğitim uygulamaları. *AUAD*, 6(2), 11-53.
Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L., Sheng, C., Cai, Y., Li, X., Wang, J., & Zhang, Z. (2020). Mental health care for medical stay in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7, e15-17.
Dewart, G., Corcoran, L., Thirsk, L., & Petrovic, K. (2020). Nursing education in a pandemic: academic challenges in responseto COVID-19. *Indian Journal of Experimental Biology*, 58, 426-432.
Goss, J.D., & Leinbach, T.R. (1996). Focusgroups as alternative research practice. *Area*, 28 (2), 115-123.
Hayter, M., & Jackson, D. (2020). Pre-registration under graduate nurses and the COVID-19 pandemic: students or workers? *JCN Journal of Clinical Nursing*, 29(17-18), 3115-3116.
Ikhlaq, A., Bint-e-Riaz, H., Bashir, I., & Ijaz, F. (2020). Awareness and attitude of under graduate medical students to wards 2019-novel coronavirus. *Pak J Med Sci*. 36(COVID19-S4), COVID19:12-36.
Karakurt, P., Yıldırım, A., Hacıhasanoğlu, R., & Özman, Ö. (2017). Sağlık yüksekokulu birinci sınıf öğrencilerinin hemşirelik mesleği hakkındaki düşünceleri. *STED*, 26(4), 133-138.
Kardaş Özdemir, F., & Akgün Şahin, Z. (2016). Hemşirelik bölümü birinci sınıf öğrencilerinin meslek seçimini etkileyen faktörler. *ACU Sağlık Bil Derg*, 1, 28-32.
Kirti, M.J., & Thackersey, L. (2020). Attitude of students to wards nursing profession during the covid pandemic. *Purakala (UGC CareJournal)*. ISSN, 0971-2143.
Kmiotowicz, Z. (2020). Rules on isolation rooms for suspected Covid-19 cases in GP surgeries to be relaxed. *BMJ. Clinical research ed*, 368-707.
Kumbetoğlu, B. (2005). Qualitative methods and research in anthropology and sociology. Istanbul: Baglam Press, 99.
Kürtüncü, M., & Kurt, A. (2020). Covid-19 pandemisi döneminde hemşirelik öğrencilerinin uzaktan eğitim konusunda yaşadıkları sorunlar. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 66-77.
Lai, J., Ma, S., & Wang, Y. (2020). Factors associated with mental health out come among health care worker sex posed to corona virüs disease 2019. *JAMA Netw Open*, 3(3), e203976.
Mason, D.J., & Friese, C.R. (2020). Protecting health care workers against covid-19 and being prepared for future pandemics. *In JAMA Health Forum*,1(3), e200353-e200353.
Mei, S.L., Yu, J.X., He, B.W., & Li, J.Y. (2011). Psychological investigation of university students in a university in Jilinprovince. *Med Soc (Berkeley)*, 24(05):84-86.
Moreno, E., Navarro,R.M., Adrián, L., Medrano C.G., Ruiz-Rodríguez, P, Joaquín, T., Sofia Moretti, L., Cano-Vindel, A., & Moriana, J.A. (2019). Factorial in variance of a computerized version of the GAD-7 across various demographic group sandover time in primary care patients. *Journal of Affective Disorders*, 252, 114-121.
Savitsky, B., Findling, Y., Ereli, A., & Hendel, T. (2020). Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Education in Practice*, 102809.
Schwartz, J., King, C.C., & Yen, M.Y. (2020). Protecting health care workers during the covid-19 coronavirus outbreak-lessons from Taiwan’s SARS response. *Clinical Infectious Diseases*, c1aa255.
Shigemura, J., Ursano, R.J., Morganstein, J.C., Kurosawa, M., & Benedek, D.M. (2020). Public responses to the novel 2019 corona virus (2019-nCoV) in Japan: mental health consequences and target populations. *Psychiatryclin, Neuro sci*, 74 (4), 281-282.
Streubert, H.J., & Carpenter, D.R. (1999). *Qualitative research in nursing advancing the humanistic imperative* (2nd ed.). Philadelphia-New York-Baltimore:Lippincottpp, 44.

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- Tan, M., Yüncü, S., & Őentürk, Ö. (2007). Üniversite öğrencilerinin hemşireliğe bakış açıları. Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi, 10, 1.
- Tercan, A., Saka, Y., Kasap, Ő., & Gün, S. (2017). Lise ve üniversite düzeyinde eğitim gören hemşirelik öğrencilerinin mesleğe bakış açıları. GÜSBD, 6(4), 98-105.
- Thompson, G., Mc Bride, R.B., Hosford, C.C., & Halaas, G. (2016). Resilience among medical students: the role of coping style and social support. Teach Learn Med, 28 (2), 174-182.
- Türk Tabipleri Birliđi Covid-19 Danışma ve İzleme Kurulu, Covid-19 Pandemisi İki Aylık Deđerlendirme Rapor (2020). <https://www.ttb.org.tr/kutuphane/Covid19-rapor.pdf>
- Viana, R.B., & Barbosa de Lira, C.A. (2020). Commentary Exergames as Coping Strategies for Anxiety Disorders During the COVID-19 Quarantine Period. Games for Health Journal, 9, 3.
- Wang, C., Horby, P.W., Hayden, F.G., & Gao, G.F. (2020). A novel corona virüs out break of global health concern. Lancet, 395 (10223), 470-473.
- White, S., Omer, M., & Mohamma, G.N. (2020). Knowledge, Attitudeand Practice on Prevention of Air borne and Droplet Infections During the Outbreak of Corona Virus Among the College Students in University of Bisha, SaudiArabia. IJCRR. 11(04), 20773-20776.
- Xiao, C., (2020). A novel approach of consultation on 2019 novel corona virus (COVID-19) related psychological and mental problems: structured letter therapy. Psychiatry Investig, 17 (2), 175-176.
- Zhi, X., Lu, L., Pu, Y., Meng, A., Zhao, Y., Cheng, F., Jiang, J., Li Xu, J., & Zeng, Y., (2020). Investigation and analysis of psychological stress and Professional identity of nursing students during COVID-19 pandemic. Nurse Educ Today, 92, 104471.