



ORIGINAL ARTICLE

Factors Affecting Students' Nursing Profession Preference During the Pandemic Period

Pandemi Döneminde Öğrencilerin Hemşirelik Mesleği Tercihini Etkileyen Faktörler

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Abstract

Objective: In this study, it was aimed to determine the factors that affect the nursing profession preference of the first-year nursing students during the Coronavirus disease-2019 (COVID-19) pandemic.

Method: This cross-sectional and descriptive study was conducted between March-June 2021 with first-year nursing students studying. Student information form, the fear of COVID-19 scale, and vocational choices in entering the nursing scale were used to collect data.

Results: 75.4% of the students stated that the COVID-19 pandemic did not affect their career choice, 46% reported that they planned to choose the nursing profession before the pandemic, and 52.1% of the students preferred the nursing profession because they liked it. As a result of multiple regression analysis, factors including fear of COVID-19, presence of chronic disease in family members, choosing the profession because they like it, choosing the profession because of its place and importance in society, choosing the profession because it is an ideal profession, choosing the profession under the influence of family/friends, and choosing nursing because it is seen as an indispensable profession during the pandemic were found to have a significant effect on the total scores of the vocational choices in entering nursing scale ($p<0.05$).

Conclusion: Although the pandemic has caused nurses to work under very difficult conditions, it has once again revealed how important the nursing profession is for society. Despite seeing the difficulties experienced in this process and being afraid of COVID-19, the students chose the nursing profession because they loved it and saw it as indispensable.

Keywords: Nursing profession, vocational choices, nursing student, COVID-19 pandemic

Öz

Amaç: Bu çalışmada, Koronavirüs hastalığı-2019 (COVID-19) pandemisi sürecinde birinci sınıf hemşirelik öğrencilerinin hemşirelik mesleği tercihini etkileyen faktörlerin belirlenmesi amaçlanmıştır.

Yöntem: Kesitsel ve tanımlayıcı olarak plnlanan bu çalışma, Mart-Haziran 2021 tarihleri arasında öğrenim gören hemşirelik birinci sınıf öğrencileri ile gerçekleştirildi. Verilerin toplanmasında öğrenci bilgi formu, COVID-19 korkusu ölçeği ve hemşirelikte meslek seçimi ölçeği kullanılmıştır.

Bulgular: Öğrencilerin %75,4'ü COVID-19 pandemisinin meslek seçimlerini etkilemediğini, %46'sı hemşirelik mesleğini pandemiden önce seçmeyi planladığını ve öğrencilerin %52,1'i hemşirelik mesleğini sevdiği için tercih ettiğini belirtti. Yapılan çoklu regresyon analizi sonucunda, COVID-19 korkusu, aile üyelerinde kronik hastalık varlığı, mesleği sevdiği için seçme, mesleği toplumdaki yeri ve önemi nedeni ile seçme, idealindeki meslek olduğu için seçme, aile/arkadaş etkisinde kalarak seçme, pandemi sürecinde hemşireliği vazgeçilmez bir meslek olarak gördüğü için seçme durumlarının, hemşirelikte meslek seçimi ölçeği toplam puanları üzerinde anlamlı etkiye sahip olduğu bulundu ($p<0,05$).

Sonuç: Pandemi süreci hemşirelerin çok zor koşullar altında çalışmasına neden olmakla birlikte, hemşirelik mesleğinin toplum için ne kadar önemli olduğunu bir kez daha gözler önüne sermiştir. Bu süreçte yaşanan zorlukları görmelerine ve COVID-19'dan korkmalarına rağmen öğrenciler hemşirelik mesleğini sevdikleri ve vazgeçilmez olarak gördükleri için seçmişlerdir.

Anahtar Kelimeler: Hemşirelik mesleği, meslek seçimleri, hemşirelik öğrencisi, COVID-19 pandemisi

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Introduction

The Coronavirus disease-2019 (COVID-19) pandemic, which has caused the most serious health crisis of the century globally, has been reported as an urgent public health problem by the World Health Organization (1). In this pandemic, the urgent need for health and hospital resources has increased significantly, and countries have had difficulties in meeting the increasing demands for health services. In a very short time, a large number of patients were infected and their treatment and care needs increased. This situation once again revealed the importance of the nursing profession and the concept of “care”, which is the main purpose of nursing (2,3).

During the pandemic, nurses worked devotedly in the delivery of health care services (4), and served on the frontline to meet the care needs of patients, to restore their optimum well-being and to prevent their deaths (2). In this process, some nurses who had to work long hours and were in close contact with patients infected with COVID-19 became infected, risking the health of themselves and their relatives, and some of them lost their lives and family members (5). Despite all difficulties they experience and being aware of the risks they may face; nurses continue their struggle during the pandemic with a sense of duty and great sacrifice (6).

Choosing a profession is one of the most important decisions that can affect a person’s entire life. In this respect, nurses should have chosen their profession voluntarily to fulfill the duties and responsibilities required by the profession, even in extraordinary situations such as pandemics that pose a serious threat to all humanity. The willingness of nurses to choose their profession increases the satisfaction of the individuals they care for in terms of nursing, which positively affects the professional and life satisfaction of nurses. For this reason, it is of great importance for students who prefer the nursing profession to be aware of the difficulties related to the working conditions and working areas of the profession and to choose the profession consciously (7,8). When the studies on the career choice of nursing students before the pandemic were examined, it was seen that most of the students chose the nursing profession voluntarily and were satisfied with their departments. It has been found that factors such as job guarantee, sense of helping people,

and providing a good career opportunity are effective in choosing a profession (9,10). In the studies conducted with nursing students during the COVID-19 pandemic, it has been reported that, with the increase in the need for health care professionals during the pandemic, British students think that nurses have a new opportunity, that nurses will be a part of history and that the professional value of the profession will increase, and that they have positive feelings for the profession. However, it was determined that some students felt anxiety or fear about the nature of nursing care during the pandemic and were afraid of working with severely and terminally ill patients and of harming patients (11). In a study conducted in Japan, it was reported that the COVID-19 pandemic increased nursing students’ sense of belonging and collectivism, as well as the sense of serving their own country and hopeless patients, increasing the satisfaction levels of students (12).

It is thought that the pandemic, which makes the risks and difficulties of the nursing profession visible, may have an impact on individuals’ nursing profession preferences. There is no study in the literature examining the effect of the COVID-19 pandemic on career choice. For this reason, this study aimed to examine the factors effective in the career preference of the first-year students who choose the nursing profession during the COVID-19 pandemic.

Material and Methods

Design

The study had a cross-sectional and descriptive design. Research data were collected online between March-June 2021 via “Google Forms”.

Participants and Sampling

The study was conducted with first-year nursing students (n=402) in the nursing department of the faculty of health sciences in a university, during the 2020-2021 academic year in the spring semester. This study was aimed at the universe population and so a sample size was not calculated. The STROBE cross-sectional reporting guidelines were used. The inclusion criteria were as follows: The students (1) were aged 18 years or older, (2) were enrolled in the first year of the nursing program, (3) were willing to participate in this study, and (4) answered the questionnaires completely. A total of 378 nursing students (constituting 94.02% of the universe) who could be reached between the dates of the research and met the study criteria, were included in the research.

Data Collection

The data of the study were collected using student information form, the fear of the COVID-19 scale (FCS), and vocational choices in entering nursing scale (VCENS).

Student information form, prepared by the researchers, includes the socio-demographic characteristics of the students (age, gender, presence of a relative working as a

Main Points

- It is of great importance for students who prefer the nursing profession to be aware of the difficulties, especially in the pandemic period, related to the nurses’ working conditions and working areas of the profession and to choose the profession consciously.
- It was found that despite the difficulties nurses experienced during the pandemic and the fear of Coronavirus disease-2019, first-year nursing students preferred the nursing career because they liked the profession, and they found the profession suitable for them.
- Although the pandemic process is challenging for the nursing profession, the devoted work of nurses has revealed the indispensability of the profession for the society and has positively increased the image of the nursing profession.

nurse, presence of chronic disease in themselves and family, COVID-19 infection in themselves and family members, loss of a relative due to COVID-19, etc.), the factors that may be related to career choice and that may affect their career choice.

VCENS was developed by Zysberg and Berry (13) to determine the reasons affecting the career choice of nursing students, and its validity and reliability in Turkey were made by Önlü and Saraçoğlu (14). The Likert-type scale (between 0% and 100%) consists of 17 items and two sub-dimensions (vocational congruency, survival motivations). Each item is rated between 0% (it was not effective in my choice of profession) and 100% (the most important factor in my choice of profession). The highest score that can be obtained from the scale is 100, and the lowest score is 0. The total scale and subscale scores are obtained by dividing the sum of the scores given to the scale by the number of questions in the scale. The Cronbach's alpha internal consistency coefficient of the scale was calculated as 0.79 in the study of Önlü and Saraçoğlu (14), and 0.73 in this study.

The FCS was developed by Ahorsu et al. (15) to determine the level of fear of COVID-19 experienced by the individual, and the Turkish validity and reliability of the scale was conducted by Satici et al. (16). The 5-point Likert type scale consists of one dimension and seven items (1: Strongly disagree and 5: Strongly agree). The scores that can be obtained from the scale vary between 7 and 35. A high score means that the individual's fear of coronavirus is at a high level. The Cronbach's alpha internal consistency coefficient of the scale was determined as 0.82 in the study of Ahorsu et al. (15), and 0.84 in the study of Satici et al. (16). In this study, it was determined as 0.83.

Ethical Aspects of Research

Ethics Committee approval and necessary institutional permissions were obtained from the Faculty of Medicine Scientific Research Ethics Committee of a Trakya University (TÜTF-BAEK 2020/403 protocol code) to conduct the research. The access link of this research conducted online was shared with the students. On the first page of the questionnaire, the students were informed that participation was voluntary, their personal information and confidentiality would be protected, and an informed consent page was presented. The students who gave consent answered the questionnaire form.

Statistical Analysis

The IBM SPSS 22.0 (Statistical Package for Social Sciences 22.0) package program was used for the evaluation of the data. The conformity of the data to the normal distribution was evaluated with the Kolmogorov-Smirnov test to avoid a lower limit for the expected frequencies and thus to prevent information loss. The number and percentage distribution were used in the evaluation of categorical data and mean-standard deviation was used in continuous data. Multiple linear regression, the "backward" method was used to define the explanatory variables on the nursing career choice

scale (NCCS), and $p < 0.05$ was accepted as the statistical significance limit.

Results

The mean age of the first-year students participating in the study was 18.82 ± 0.98 years, and 70.9% of them were females. 44.7% of the students reported that they had a relative working as a nurse, 6.1% reported that they had a chronic disease, and 45.5% reported that their family members had a chronic disease. 25.9% of the students reported that they/family members were infected with COVID-19, and 4% reported that they lost a relative due to COVID-19 (Table 1).

75.4% of the students reported that the COVID-19 pandemic did not affect their career choice, and 46% reported that they planned to choose the nursing profession before the pandemic. 52.1% of the students preferred the nursing profession because they liked it, and 50% because they thought that they would not have any difficulties in employment after graduation (Table 2).

It was found that the "FCS" total mean score of the first-year nursing students participating in the study was 16.81 ± 5.20 , and the total mean score for the "VCENS" was 65.44 ± 11.49 . The mean score of the students in the "vocational congruency" sub-dimension of VCENS was 74.43 ± 15.70 , and the mean score they received from the "survival motivations" sub-dimension was 48.96 ± 15.80 (Table 3).

In the multiple linear regression analysis, it was determined that factors including the fear of COVID-19 ($p = 0.004$; B: 0.308), presence of chronic disease in family members ($p = 0.031$; B: -2.401), choosing the nursing profession because they like it ($p = 4.500$; B: 0.000), choosing the nursing profession because it is an ideal profession ($p = 4.288$; F: 0.019), choosing the profession under the influence of family/friends ($p = -4.777$; F: 0.004), choosing the nursing profession for its place and importance in society ($p = 3.154$; B: 0.018), and choosing nursing because it is seen as an indispensable profession during the COVID-19 pandemic ($p = 7.749$; B: 0.000) had a significant effect on students' total scores of the NCCS. Adjusted R^2 values were found as 19.7. Accordingly, the increasing fear of COVID-19, the absence of chronic diseases in family members, liking the nursing profession, seeing the nursing profession as the ideal profession, not being under the influence of family/friends when choosing the nursing profession, the place and importance of the nursing profession in society and seeing nursing as an indispensable profession during the COVID-19 pandemic has been effective in choosing a nursing profession (Table 4).

Discussion

It is reported that the career choice, which is one of the most important decisions in an individual's life, is affected by many factors, and that the career choice is also related

Table 1.
Socio-demographic Characteristics of the Students (n=378)

Variables	n	%
Age (Mean ± SD=18.82±0.98)		
Gender		
Female	268	70.9
Male	110	29.1
Presence of nurses in the family		
Yes	169	44.7
No	209	53.3
Presence of chronic disease		
Yes	23	6.1
No	355	93.9
Presence of chronic disease in family members		
Yes	172	45.5
No	206	54.5
Infection of themselves/family members with COVID-19		
Yes	98	25.9
No	280	74.1
Experiencing the loss of a relative due to COVID -19		
Yes	15	4.0
No	363	96.0

SD=standard deviation, COVID-19=Coronavirus disease-2019

to the standard of judgments of individuals, their interest in the profession, their beliefs and their expectations from the profession. Making a career choice of profession with a conscious awareness will enable the individual to adapt to the profession more easily and get satisfaction from the profession (9). In the study conducted by Alkaya et al. (17) with American and Turkish nursing students, it was reported that 99.4% of American nursing students and 54.6% of Turkish nursing students chose the profession consciously. In other studies conducted in Turkey, it has been found that students choose the nursing profession willingly (18). In this study, conducted during the COVID-19 pandemic, it was found that the students willingly preferred the nursing profession for themselves and their loved ones, without being affected by the COVID-19 pandemic. Despite the difficult conditions that nurses had to struggle with during the pandemic, the students were not affected by this negative situation and preferred the nursing profession willingly.

Uncertainty regarding the COVID-19 pandemic has had widespread and serious impacts on people's daily lives around the world. To control the pandemic, countries have taken several decisions to reduce human mobility within and outside their borders, this has caused the restriction of economic activities, and our lives have changed radically, rapidly, and abruptly. During the pandemic, many people experienced economic difficulties, while some workplaces were downsizing, some were closed temporarily or permanently, the demand for labor decreased and individuals began to experience obstacles in maintaining their working life. Healthcare service sectors were also widely affected by the COVID-19 crisis (19). The increase

in the urgent need for health care services during the pandemic has caused a demand beyond the limited capacity, leading to financial insufficiency as well as health care professionals (20). During this process, newly graduated nurses have been employed in specialized units such as intensive care without being subjected to orientation programs to meet the increasing health service needs. Due to the intense and high-risk working conditions of nurses during the pandemic, the demands to resign increased, but many countries did not accept these resignation demands (21). When the literature is examined, it is seen that Turkish nursing students choose a nursing career because they think that it is easier to find a job in the nursing profession compared to other fields (10,22). In the results of Cho et al.'s (23) study, it was reported that the guarantee of finding a job is the most important reason affecting the career choice of Korean nursing students. In this study, it was found that the ease of finding a job after graduation was an important factor in choosing the nursing profession. In line with this result, it can be said that the students are concerned about finding a job while choosing a profession, but they realize that the nursing profession is an indispensable profession for people despite all the difficulties they have experienced during the COVID-19 pandemic, and they think that they will not have any difficulties in employment after graduation.

In their study conducted in China during the severe acute respiratory syndrome epidemic in early 2003, Sun et al. (24) found that students better understand the dangers nurses may face while fulfilling their roles and responsibilities during the epidemic, they are worried about their job security, and some students have the thought of leaving

the nursing profession in the future during the pandemic. In this study, 75.4% of the students stated that the difficulties experienced by nurses during the pandemic did not affect their choice of profession, and 46% stated that they planned to choose the nursing profession before the pandemic. These results suggest that our students tend toward the nursing profession with intrinsic motivation. Studies report that professional suitability plays a much more important role in choosing a profession than vital reasons (13,17,25).

According to the scores they got from the sub-dimensions of the NCCS, the results of this study show that students give more importance to professional suitability rather than vital reasons in choosing a career.

It is known that the precautions taken during the pandemic prevent many risks in terms of physical health but cause some psychological side effects. In this stressful period when we have to leave our daily routines and experience unwanted losses, many people are trying to adapt to the

Table 2.
Characteristics of Students Regarding Career Choice During the Pandemic (n=378)

Variables	n	%
The effect of the COVID-19 pandemic on the career choice		
Yes	93	24.6
No	285	75.4
Planning to choose the nursing profession before the pandemic		
Yes	174	46.0
No	204	54.0
Preferring the nursing profession because they like it		
Yes	197	52.1
No	181	47.9
Preferring the nursing profession because of not having any difficulty in employment after graduation		
Yes	189	50.0
No	189	50.0
Preferring the nursing profession because it is the ideal profession		
Yes	42	11.1
No	336	88.9
Preferring the nursing profession under the influence of family-friends		
Yes	48	12.7
No	330	87.3
Preferring the nursing profession under the influence of social media		
Yes	8	2.1
No	370	97.9
Preferring the nursing profession for its place and importance in society		
Yes	81	21.4
No	297	78.6
Preferring nursing because of seeing it as an indispensable profession during the pandemic		
Yes	56	14.8
No	322	85.2

COVID-19=Coronavirus disease-2019

Table 3.
Total and Sub-dimension Mean Scores of FCS and VCENS

Scales and sub-dimensions	Possible min-max	Obtained min-max	Mean ± SD
FCS total	7-35	7-35	16.81±5.20
VCENS total	0-100	35.29-94.71	65.44±11.49
Vocational congruency	0-100	8.18-100	74.43±15.70
Survival motivations	0-100	5-100	48.96±15.80

FCS=the fear of COVID-19 scale, VCENS: vocational choices in entering nursing scale, SD=standard deviation, COVID-19=Coronavirus disease-2019

Table 4.
Factors Affecting the VCENS

Variables	B	SD	Beta	t	p
Fear of COVID-19 scale total score	0.308	0.105	0.139	2.938	0.004
Presence of nurses in family/relatives	1.947	1.081	0.084	1.801	0.073
Presence of chronic disease in the family	-2.401	1.108	-0.104	-2.167	0.031
Planning to choose the nursing profession before the pandemic	2.264	1.293	0.098	1.751	0.081
Prefer the nursing profession because they like it	4.500	1.147	0.196	3.922	0.000
Preferring the nursing profession because it is the ideal profession	4.288	1.823	0.117	2.352	0.019
Preferring the nursing profession under the influence of family-friends	-4.777	1.652	-0.139	-2.892	0.004
Preferring the nursing profession for its place and importance in society	3.154	1.324	0.113	2.382	0.018
Preferring nursing because of seeing it as an indispensable profession during the pandemic	7.749	1.677	0.240	4.620	0.000

VCENS=vocational choices in entering nursing scale, B=coefficient, SD=standard deviation, Beta=standardised beta coefficient, t=student's t-test, COVID-19=Coronavirus disease-2019

reality brought by the fear of infection with the virus and have difficulty in this regard (26). In the study conducted by De Los Santos et al. (27), it is reported that the COVID-19 fear levels of the students are moderate to high, and the first-year students have the highest level of fear in the group. In the study of Kuru Alici and Ozturk Copur (28), it was found that the students' fear of COVID-19 was high. On the other hand, Martínez-Lorca et al. (29) reported that students' fear of COVID-19 was moderate. As a result of this research, it was seen that although the COVID-19 fear levels of the students were not very high, the increasing fear of COVID-19 influenced the NCCS scores. Despite the increasing fear of COVID-19, students preferred the nursing profession. It is thought that the reason for this situation is the job guarantee after graduation.

COVID-19 infection is more common in individuals with chronic diseases, which worsens the prognosis and increases the mortality rate. In addition, psychological disorders such as anger, depression, and anxiety, which are frequently seen in individuals with chronic diseases, have increased with the COVID-19 pandemic (30). In this study, it was determined that the absence of chronic disease in the family was a factor affecting the scale of career choice. This situation suggests that students may experience the fear of infecting their family members due to the profession they prefer and endangering their lives.

Individuals who have a profession in line with their interests and abilities, while fulfilling the requirements of their profession, they also get professional satisfaction and work happily and efficiently (9). In the study conducted by Prater and McEwen (31), it was found that the second most common reason for students to choose a nursing career is the desire to work in the field of health or medicine. In the study of Kılınç et al. (25), most of the students preferred the

nursing department willingly in line with their interests. In this study, it was determined that the students' love of the nursing profession and seeing it as their ideal profession were effective in choosing a nursing career.

The COVID-19 pandemic can be seen as an undesirable process but allows nurses to build a good image in society. The devotion of nurses all over the world during the pandemic has given the opportunity to understand once again the indispensability of nursing for society on a global scale. Thus, the positive attitude towards the importance and image of the profession in society has increased. This situation enabled nursing students to develop positive and professional attitudes towards the profession (32). In the qualitative study of Swift et al. (11) conducted with undergraduate nursing students during the COVID-19 pandemic, it was reported that the positive image of nursing perceived by society during the pandemic also affects the career choices of students positively and they are proud of their profession. As a result of this research, it has been determined that the place and importance of the nursing profession in society during the COVID-19 pandemic affects the career choice of the students and directs individuals to prefer the nursing profession.

Professional identity is important for nurses. Being a nurse has an intrinsic reward, and many students identify it as an important factor in their career choices. In the study of Swift et al. (11), it was reported that nursing students see nursing as an honorable profession that can be pursued if there is a strong passion for helping individuals in the most difficult times of their lives, as well as to be a part of history during the pandemic, and experience the feeling of taking a step into a struggle that feels personally satisfying and professionally valuable. As a result of this research, it was found that students' perception to see nursing as an indispensable

profession during the COVID-19 pandemic was effective on their career choice. Students have preferred the profession by realizing the importance and indispensability of nursing for society during the pandemic.

Conclusion

Despite the difficulty's nurses experienced during the pandemic, first-year nursing students preferred the nursing career because they liked the profession, they found the profession suitable for them, and they thought that they would not have any difficulties in finding a job after graduation. Although the fears of COVID-19 were not very high, the students preferred the nursing profession despite the increasing fear. Even though the pandemic is quite challenging for the nursing profession, the altruism of nurses has revealed the indispensability of the profession for society and has increased the positive image of the nursing profession. It will be an encouragement for individuals who will choose the nursing profession in the future if countries and institutions implement initiatives to improve working conditions by learning from the difficulties experienced by nurses during the pandemic.

Ethics Committee Approval: Ethics Committee approval and necessary institutional permissions were obtained from the Faculty of Medicine Scientific Research Ethics Committee of a Trakya University (TÜTF-BAEK 2020/403 protocol code) to conduct the research.

Informed Consent: The students were informed that participation was voluntary, their personal information and confidentiality would be protected, and an informed consent page was presented.

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