# EURASIAN JOURNAL OF HEALTH SCIENCES

e-ISSN 2651-3501

Eurasian JHS 2022; 5(3): 1-11

# Research Article/ Araştırma Makalesi

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# The Effect of Coronavirus Pandemic on the Nursing Image in the Society

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## **ABSTRACT**

No research has been found on the effects of the coronavirus pandemic, which is a serious health problem that causes many people to get sick and die, and causes high levels of fear and anxiety, on the image of the nursing profession. The aim of this study is to determine the effect of the coronavirus pandemic on the image of nursing in Turkish society. This research is designed as descriptive. The data were collected online between 05/03/2021-19/03/2021 with a questionnaire prepared by the researchers from 398 Turkish citizens. When the nursing image mean scores of the individuals participating in the research are examined; While the total score was 43.6±8.1 before the pandemic, the total score was 43.4±8.7 during the coronavirus pandemic. It was determined that the image of nursing in the society decreased during the pandemic, although not at a significant level compared to the pre-pandemic period.

**Key words:** Coronavirus, Nursing image, Pandemic, Social image.

# Koronavirüs Pandemisinin Toplumdaki Hemşirelik İmajına Etkisi öz

Birçok insanın hastalanmasına ve ölmesine neden olan, yüksek düzeyde korku ve kaygıya sebep olan ciddi bir sağlık sorunu olan koronavirüs pandemisinin hemşirelik mesleğinin imajı üzerindeki etkilerine ilişkin herhangi bir araştırmaya rastlanmamıştır. Bu çalışmanın amacı, koronavirüs pandemisinin Türk toplumundaki hemşirelik imajına etkisini belirlemektir. Bu araştırma tanımlayıcı olarak tasarlanmıştır. Veriler 05/03/2021-19/03/2021 tarihleri arasında 398 Türk vatandaşından, araştırmacılar tarafından hazırlanan anket formu ile online olarak toplanmıştır. Araştırmaya katılan bireylerin hemşirelik imajı puan ortalamaları incelendiğinde; Pandemi öncesi toplam puan 43,6±8,1 iken, koronavirüs pandemisi sırasında toplam puan 43,4±8,7 idi. Pandemi sırasında toplumdaki hemşirelik imajının pandemi öncesine göre anlamlı düzeyde olmasa da azaldığı belirlendi.

**Anahtar kelimeler**: Hemşirelik imajı, Koronavirüs, Pandemi, Toplumsal imaj.

#### INTRODUCTION

The concept of image expresses the impression that a person, institution or professional group leaves or wants to leave on the society they live in (Eser et al. 2017). The professional image in nursing is how a nurse perceives herself, her colleagues and the society about nursing (Hoeve et al. 2014). Establishing the foundations of the nursing profession in a society on professionalism, scientificity, high self-esteem and trust positively affect the nursing image in that society (Hoeve et al. 2014; Lim et al. 2017).

While nurses are considered to be hard-working, intellectual, kind and loving people, it is stated that factors such as nursing practices are seen in a lower status than the doctor practices, the nursing practices are considered more dependent, and nurses are employed with low wages, negatively affect the nursing image (Glerean et al. 2017; Takase et al. 2006).

The nursing profession, which does not have a sufficient positive image given by the society, is seen as insignificant, and the perception of not being respected decreases the commitment to the profession, causes stress in the work environment and dismissal, negatively affects the quality of communication between the society and members of the profession, and as a result, the quality of the provided service decreases (Kaynar-Şimşek and Ecevit-Alpar 2019). Creating and maintaining a positive nursing image is very important in terms of contributing to the job satisfaction of nurses, increasing satisfaction, affecting social status and career development. In addition, a positive image is necessary to increase the preferability of the nursing profession and to bring material and moral value to the profession (Varaei et al. 2012).

Although the crises, which have occurred in societies throughout history, and in which certain occupational groups played an active role in their solution, negatively affected most of the members of the society, they are quite effective in drawing attention to the meaning and importance of professions that take an active role in the solution. At such times, the perspective of the members of the profession involved in the resolution of the crisis may change and the image of the profession may be affected positively or negatively. The pandemic, which creates a

heavy responsibility in terms of treatment and care in the field of health, has also affected healthcare workers in many dimensions (Kutlu 2020; Xu et al. 2020). While the healthcare workers have been exposed to the pathogens, as well as the difficulties and physical effects (e.g. headache) of working with personal protective equipment (PPE), fear of infecting relatives and friends, feeling helpless in the face of an unknown disease, depression, anxiety, post-traumatic stress disorder, the risks and dangers such as feelings of hopelessness and burnout during the coronavirus pandemic, they have continued to perform their profession with a great pride (Fontanini et al. 2021; Kang et al. 2020; Lai et al. 2020; Ornell et al. 2020; Pappa et al. 2020). The COVID-19 pandemic has also gone down in world history as one of these challenging processes. The pandemic process has been a turning point in terms of shedding light on the work of nurses and the importance of this work, while all members of the healthcare team, especially nurses, are faced with great pressure and difficulty while fulfilling their professional roles (Parveen, 2021). According to a study conducted in the United States, 44.5% of individuals stated that nursing professionals did not benefit from problem solving, critical thinking and intelligence elements, and 40% stated that they were the assistant of a medical figure/specialist (Heierle Valero, 2009). According to a study conducted in our country, it was determined that the image of nursing in the society is moderately positive (Sis Çelik et al., 2013). In another study, it was determined that the images of nursing students towards the nursing profession were moderate (Kızılcık Özkan et al., 2017). The nursing profession is still seen as an auxiliary profession by the society (Simsek & Alpar, 2019).

Although there are similar studies conducted at different times, no studies have been found to determine the image of nursing during the COVID-19 pandemic. It is thought that this original study, which is planned to eliminate the deficiency in this subject, will contribute to the literature in this field.

The aim of this study is to determine the effect of the coronavirus pandemic on the nursing image in Turkish society.

In this direction:

-What are the effects of the coronavirus pandemic on the

image of nursing in society?

-ls there a difference between nursing images before and during the pandemic? questions will be answered and will be a source for future studies.

## MATERIAL AND METHOD

# **Research Type**

This research has been conducted in a descriptive type.

## The Population and Sample of the Research

The population of the research consisted of Turkish citizens over the age of 18 who are connected to online social networks (i.e. WhatsApp, Twitter, Instagram). According to the formula for calculating the sample size from a population with a certain number; When the population was 100,000,000, it was observed that the sample size was 384 and the sampling error was d=±0.05 for p=0.5 q=0.5 at the  $\alpha$ =0.05 significance level (Yazıcıoğlu and Erdoğan 2011). Accordingly, 398 individuals who agreed to participate in the study and met the inclusion criteria formed the sample of the study. Research data were collected with a questionnaire form created through google forms.

#### **Inclusion Criterias:**

Being a citizen of the Republic of Turkey, being able to read and write in Turkish, being over the age of 18, having an online (i.e. whatsApp, Twitter, Instagram) connection, voluntarily agreeing to participate in the study.

# **Exclusion Criterias**;

Getting a diagnosis/treatment of any mental disorder or being included in a support/therapy group, having a first degree relative who performs the nursing profession, executing the nursing profession, incomplete filling of the questionnaire.

# **Ethical Aspect of the Research**

In order to conduct the research, written permission was obtained from the Clinical Research Ethics Committee of the relevant university with the ethics committee decision dated 30.12.2020 and numbered 2020/344.

At the beginning of the online study, necessary explanations were made about the research through the informed consent form on the front of the questionnaire, and consent was obtained from the individuals that they agreed to participate.

#### **Data Collection**

In the present study, a questionnaire form created by the researchers in line with the literature was used to collect the data. The survey form which consists of an introductory information form that evaluates the demographic characteristics of individuals (age, gender, socio-economic level, education level, etc.) and their opinions on the nursing profession and the "Nursing Image Scale" to determine the nursing image of the society. The research data were collected online between 03/05/2021-03/19/2021 through a questionnaire form created by the researchers. NIS was repeated twice in the same questionnaire form, in which individuals answered with their thoughts before the pandemic and their thoughts during the pandemic process. In the first scale, individuals were asked to answer the questions with their thoughts before the pandemic, and in the second scale, they were asked to answer the questions with their thoughts during the pandemic.

#### Data collection tools

Introductory Information Form: The Introductory Information Form was developed by the researchers in line with the literature (Celik et al. 2013; Ozdelikara et al. 2015). The form consists of 7 questions to determine the socio-demographic characteristics of individuals (age, gender, marital status, education level, occupation, income level, place of residence) and 8 questions for the nursing profession (preferring the nursing profession, presence of a relative who practices the nursing profession, etc.) consists of a total of 15 closed-ended questions.

The Nursing Image Scale (NIS): The items of the NIS, which was developed to determine the image of individuals regarding the nursing profession, were developed by Özsoy as a questionnaire, but their psychometric properties were not examined (Özsoy, 2000). The psychometric properties of the scale were analyzed by Çınar and Demir (2009) with permission from Özsoy (Özsoy 2000). The scale is in 3-point Likert type and scored as "Agree" (3 points), "Partly Agree" (2 points), "Disagree" (1 point). The scale consists of 28 items and three sub-dimensions (General Appearance, Communication, Occupational and Educational Characteristics). The lowest 28 and the highest 84 points can be obtained from the scale. An increase in the total score indicates that the image of nursing is positive (Çınar and Demir 2009). In this study, the Cronbach's alpha value of the scale was found to be 0.877.

# **Data Analysis**

The data of the study were analyzed with the help of SPSS 26.00 package program and in the measurements; Number and percentage, Mann-Whitney U test, Wilcoxon test, Kruskal Wallis test were used. Internal consistency of the scale and its sub-dimensions was evaluated using Cronbach's Alpha.

#### **RESULTS**

The average age of the individuals participating in the study was  $30.8 \pm 9.9$ , and the majority of the participants were female, married, college (associate degree)/university (license degree) graduate. Most of the participants were civil servants and have spent most of their life in the province, and most of them had the income level of "equal to expenses". When the opinions of the participants about the nursing profession were examined, the majority of them did not prefer the nursing profession, and they recommended the profession, they thought that it is a necessary, valuable and respected profession for the society. Most of the participants were close to the individuals who chose the nursing profession, and

most of them thought that both genders can do the nursing profession. When looking at the level of satisfaction with the nursing service received, most of the participants were moderately satisfied with the nursing services they received before the coronavirus pandemic, while the majority of them did not receive nursing services during the coronavirus pandemic.

Considering the Nursing Image Scale mean scores of the individuals participating in the study, the mean General Appearance sub-dimension was 12.0 $\pm$ 2.0 before the pandemic and 12.2 $\pm$ 2.1 during the pandemic was found (p $\ge$ 0.05). The communication subscale mean was 9.8 $\pm$ 3.3 before the pandemic and 9.7 $\pm$ 3.2 during the pandemic. The mean score of the Occupational and Educational Characteristics sub-dimension was 21.7 $\pm$ 4.7 before the pandemic and 21.3 $\pm$ 5.2 during the pandemic, and a statistically significant difference was found (p<0.05). The mean total score of the scale was 43.6 $\pm$ 8.7 before the pandemic and 43.4 $\pm$ 8.7 during the pandemic (Table 1)(p<0.05).

**Table 1.** The distribution of community's nursing image average scores

The Nursing Image Scale	Before the Pandemic ( $\bar{x} \pm SD$ )	During the Pandemic ( $\bar{x} \pm SD$ )	Test and Significance
General Appearance	12.0±2.0	12.2±2.1	z:-1.961,p:0.05
Communication	9.8±3.3	9.7±3.2	z:-1.224,p:0.22
Occupational and Educational Characteristics	21.7±4.7	21.3±5.2	z:-2.899,p:0.004
Total	43.6±8.1	43.4±8.7	z:-1.294, p:0.19

When the socio-demographic characteristics of the individuals and the average scores they got **before the pandemic**; The pre-pandemic vocational and educational qualifications mean scores of individuals who were male, had a primary/ secondary school degree, were workers and had less income than expenditure were found to be significantly higher than the other groups. Pre-pandemic nursing image total scores of individuals with other professions and less income than expenditure were found to be higher than other groups. Finally, the general appearance score of the individuals whose income is less than their expenses, and the communication scores of the individuals whose income is more than their expenses were found to be significantly higher than the other groups). (p<0.05)(Table 2).

Considering the socio-demographic characteristics of individuals and their average score during the pandemic process; The vocational and educational qualifications scores of the individuals who were male, had a primary/secondary school degree, were workers and had less income than expenditure were found to be statistically significantly higher than the other groups. Nursing image total score of individuals who are male, have other professions, and have less income than expenditure has been found to be higher than the other groups. Finally, the overall outlook score of those with less income than expenses; communication scores of those whose income is more than their expenses were found to be statistically significantly higher than the other groups (p<0.05) (Table 2).

Table 2. The relationship between individuals' sociodemographic characteristics and the Nursing Image Scale and its sub-dimensions

			Before the Coror	Before the Coronavirus Pandemic			During the Coror	During the Coronavirus Pandemic	
		General Appearance 1	Communication 1	Occupational and Educational Characteristics 1	Nursing Image 1	General Appearance 2	Communication 2	Occupational and Educational Characteristics 2	Nursing Image 2
Gender	Female Male	12.1±2.0 11.9±1.9	9.8±3.2 9.9±3.3	21.1±4.3 23.1±5.1	43.1±7.7 45.0±9.0	12.2±2.1 12.3±2.1	9.6±3.1 10.1±3.5	20.7±4.6 23.1±6.1	42.6±8.0 45.5±10.1
Test and Significance		U:14433 p:0.25	U:15124.5 p:0.66	U:12384.5 p:0.002	U:13992 p:0.12	U:14862.5 p:0.48	U:14398.5 p:0.24	U:12301 p:0.001	U:13185 p:0.01
Educational Level	Primary school or pre-school degree High School degree College (associate degree)/university (license degree) Postgraduate degree	11.8±1.5 11.9±2.2 12.1±2.0 12.0±1.8	9.8±2.8 9.7±3.2 9.9±3.2 9.6±3.5	23.2±5.8 22.4±5.4 21.8±4.5 20.1±4.3	44.8±8.1 44.1±9.1 43.9±8.1 41.8±7.6	12.0±2.0 12.7±2.5 12.2±2.1 12.0±1.9	9.8±3.2 9.3±2.8 9.8±3.2 9.6±3.4	23.0±5.8 22.1±5.1 21.4±5.1 20.0±5.0	45.0±9.2 44.2±8.8 43.6±8.7 41.7±8.4
Test and Significance		H:1.893 p:0.59	H:0.756 p:0.86	H:11.082 p:0.01	H:3.942 p:0.26	H:1.759 p:0.62	H:0.962 p:0.81	H:10.158 p:0.01	H:4.201 p:0.24
Occupation	Unemployed Worker Civil Servant Retired Other	12.2±1.9 12.2±2.2 11.9±1.9 11.4±2.4 12.0±2.2	10.1±3.4 9.5±3.1 9.5±3.2 8.4±2.6 10.8±3.3	22.3±5.1 23.6±4.7 20.6±3.8 19.2±1.9 22.4±6.29	44.7±8.8 45.4±8.0 42.2±7.0 39.0±4.4 45.5±9.9	12.4±2.1 12.7±2.3 12.0±2.1 10.6±2.7 12.4±2.2	10.1±3.2 9.4±3.1 9.3±3.1 9.6±4.5 10.9±3.6	22.4±5.6 22.9±5.4 20.0±4.1 19.8±3.9 22.3±6.5	44.9±9.2 45.2±8.8 41.4±7.3 40.0±6.2 45.7±11.3
Test and Significance		H:2.87 p:0.61	H:6.455 p:0.16	H:15.713 p:0.003	H:9.917 p:0.04	H:7.005 p:0.13	H:8.433 p:0.07	H:19.035 p:0.001	H:14.405 p:0.006
Income Level	Less than expenses Equal to expenses More than expenses	12.5±2.0 11.8±1.9 11.9±1.9	10.2±3.5 9.2±2.9 10.5±3.5	22.5±4.9 20.7±4.4 22.4±4.9	45.3±8.5 41.9±7.2 44.8±8.7	12.6±2.1 11.8±2.0 12.5±2.3	10.2±3.4 9.0±2.8 10.4±3.4	22.5±5.3 20.2±4.7 21.9±5.6	45.4±8.9 41.2±7.7 44.9±9.4
Test and Significance		H:9.844 p:0.007	H:9.324 p:0.009	H:13.234 p:0.001	H:15.721 p:0.000	H:11.572 p:0.003	H:12.427 p:0.002	H:16.807 p:0.000	H:21.382 p:0.000

U: Mann Whitney U Coefficient H: Kruskal Wallis Coefficient

Table 3. The relationship between individuals' opinions about the nursing profession and the Nursing Image Scale and its sub-dimensions

			Before the Coro	Before the Coronavirus Pandemic			During the Coron	During the Coronavirus Pandemic	
		General Appearance 1	Communication 1	Occupational and Educational Characteristics 1	Nursing Image 1	General Appearance 2	Communication 2	Occupational and Educational Characteristics 2	Nursing Image 2
Choosing the Nursing Profession	Yes No	11.7±1.9 12.3±2.0	9.1±3.0 10.5±3.3	20.9±4.8 22.4±4.6	41.9±7.8 45.3±8.0	12.0±2.1 12.5±2.1	9.1±3.0 10.4±3.3	20.6±5.0 22.0±5.2	41.7±8.3 45.0±8.8
Test and Significance		U: 16528 p:0.004	U:14943 p:0.000	U:15748.5 p:0.000	U:14612.5 p:0.000	U:17088.5 p:0.01	U:15317 p:0.000	U:16463.5 p:0.004	U:15269 p:0.000
Recommending the nursing profession to someone from the close circle	Yes	11.9±1.9 12.3±2.2	9.4±3.2 10.6±3.3	21.6±4.9 21.9±4.2	43.0±8.1 44.9±7.9	12.2±2.0 12.3±2.2	9.4±3.1 10.3±3.4	21.3±5.4 21.3±4.6	43.1±8.8 44.0±8.6
Test and Significance		U:15535 p:0.08	U:13755 p:0.001	U:16148 p:0.26	U:14666 p:0.01	U:17145.5 p:0.84	U:14900.5 p:0.02	U:16729.5 p:0.56	U:16061.5 p:0.23
Thinking that nursing is a necessary and valuable profession for the society	Yes	12.1±2.0 11.6±2.1	9.9±3.2 8.8±3.9	21.7±4.7 20.5±4.2	43.7±8.1 41.1±8.8	12.3±2.1 11.5±2.4	9.8±3.2 8.2±3.4	21.4±5.2 19.4±4.1	43.6±8.7 39.2±8.6
Test and Significance		U:2834.5 p:0.37	U:2462 p:0.09	U:2765 p:0.30	U:2486.5 p:0.10	U:2586 p:0.15	U:2198 p:0.02	U:2504 p:0.11	U:2065.5 p:0.01
Thinking that nursing is a respectable profession	Yes	12.0±2.0 12.1±1.9	9.8±3.2 9.9±3.4	21.7±4.8 21.6±4.2	43.6±8.2 43.8±7.4	12.3±2.2 12.1±1.8	9.8±3.2 9.4±3.3	21.4±5.3 20.8±4.5	43.6±8.8 42.4±8.1
Test and Significance		U:9889.5 p:0.75	U:9902.5 p:0.77	U:10044.5 p:0.90	U:9811 p:0.68	U:9556.5 p:0.47	U:9361.5 p:0.33	U:9719 p:0.60	U:9340 p:0.33
Having a relative who chose the nursing profession	Yes	12.0±1.9 12.4±2.1	9.7±3.2 10.5±3.8	21.5±4.7 22.7±4.8	43.3±8.0 45.6±8.7	12.1±2.1 12.7±2.4	9.6±3.1 10.2±3.8	21.2±5.1 22.2±5.35	43.1±8.6 45.3±9.4
Test and Significance		U:8752.5 p:0.22	U:8695.5 p:0.19	U:8315 p:0.08	U:8172.5 p:0.054	U:8259.5 p:0.06	U:8951 p:0.33	U:8556 p:0.14	U:8425.5 p:0.10

U: Mann Whitney U Coefficient

The scores of those who said they would not prefer the nursing profession in all sub-dimensions were found to be statistically significantly higher (p<0.05). Before the pandemic; Communication and nursing image total score of individuals who did not have a relative who chose the nursing profession in their immediate vicinity was found to be significantly higher than the other groups (p<0.05). During the pandemic; Communication and nursing image total scores of individuals who think that the nursing profession is necessary and valuable were found to be significantly higher than the other groups (p<0.05). Finally, during the pandemic; Communication scores of individuals who did not have a relative who chose the nursing profession in their immediate vicinity were found to be significantly higher (p<0.05) (Table 3).

#### DISCUSSION

One of the issues that nurses, who form the core of the health system, have to overcome is the nursing image. The nursing image is an extremely important concept as it is associated with entering the nursing profession, staying in nursing, developing nursing, and recommending other people as a career choice (Rezaei-Adaryani et al. 2012). Low social values and negative stereotypes given to nursing prevent internalizing the nursing pride and negatively affect the self-esteem. The employees' ability to show high performance and high work efficiency also depend on the person's job satisfaction, that is, to do the job with enthusiasm and appetence (Kaya and Oguzoncul 2016).

The pandemic, which creates a heavy responsibility in terms of treatment and care in the field of health, has also affected healthcare workers in many dimensions (Kutlu 2020; Xu et al. 2020). While the healthcare workers have been exposed to the pathogens, as well as the difficulties and physical effects (e.g. headache) of working with personal protective equipment (PPE), fear of infecting relatives and friends, feeling helpless in the face of an unknown disease, depression, anxiety, post-traumatic stress disorder, the risks and dangers such as feelings of hopelessness and burnout during the coronavirus pandemic, they have continued to perform their profession with a great motivation (Fontanini et al. 2021; Kang et al. 2020; Lai et al. 2020; Ornell et al. 2020; Pappa et al. 2020). During the coronavirus pandemic, the presence of individuals suspected of coronavirus or diagnosed with coronavirus in

different units of hospitals and the risk of contagion caused by the crowding of hospitals may cause individuals to delay their requests for medical or surgical treatments. While the majority of the participants in the study were moderately satisfied with the nursing services they received before the coronavirus pandemic, the majority of them stated that they did not receive nursing services during the coronavirus pandemic. In studies conducted in different healthcare areas around the world during the coronavirus pandemic, it is stated that although patients do not prefer not to apply to health institutions for care for various reasons, patients can be reached by telemedicine, video sending, home care and other means, so the care process can continue (Haxhihamza et al. 2021; Mojdehbakhsh et al. 2021; Shahzad et al. 2021). In addition to the efforts of individuals to avoid hospital environments due to the risk of transmission during the coronavirus pandemic, the inadequacies experienced in the use of technological means in reaching the patients can also be a reason for the inability to receive nursing services.

It is known that the nurse employment is insufficient in our country, and mistakes made in the workforce planning of employed nurses prevent the existing nurse population from working effectively (Ozkan and Uydacı 2020). With the coronavirus pandemic, many nurses have had to work in areas they had never experienced before. Although they understood the conditions underlying this pace of work, they were faced with a situation very different from the one originally stated at the beginning. Most of the time, sufficiently experienced personnel were not available, so everyone had to perform all tasks (Marsaa et al. 2021). In addition, it has been stated that the duties, authorities and responsibilities of nurses are not understood by the society and that the expectations of the society and the duties, authorities and responsibilities of nurses are different from each other (Kaynar-Simsek and Ecevit-Alpar 2019). The fact that the professional and educational characteristics of nurses were lower during the pandemic than before the pandemic, and also, the general view of nurses and their communication skills did not show a significant change during the pandemic, so these facts have revealed that the duties, authorities and responsibilities of nurses were still not well known by the society. (Table 1).

While it was stated that nurse employment was insufficient even before the coronavirus pandemic (Demiröz-Bal 2014), the inability to meet the rapidly increasing need for nurses with the coronavirus pandemic caused the number of nurses per patient in hospitals and clinics to decrease further, deficiencies and inadequacies in nursing services, and many nurses having to work in areas where they were not experts. According to the Ministry of Health 2017 data, the total number of nurses is 112,074 and the number of nurses and midwives per 100,000 people is 272. According to 2019 data, the total number of nurses is 198,103 and the number of nurses and midwives per 100,000 people is 306 (Ministry of Health, 2017; Ministry of Health, 2019). This situation may negatively affect the image of nurses, who are not the main responsible for this inadequacy, but who are at the forefront and who are face to face with patients and their relatives. The similarity of the nursing image with the pre-pandemic situation supports this idea in this study, which was carried out during this pandemic period in which healthcare professionals came to the fore (Table 3).

When the perceptions of the nursing image of the individuals participating in the study were compared according to their education levels, it was found that the nursing image decreased as the education level of the participants increased during the pandemic (Table 2). Especially, it has been seen that the Occupational and Educational Characteristics of nurses were less, even with a small difference, during the pandemic compared to the pre-pandemic period (Table 1). This finding can be explained by the increase in the expectations from nursing services as the education of the participants' increases. However, the failure to meet this expectation at the desired rate due to the extraordinary situation may have led to an insufficient perception of occupational and educational characteristics and a negative impact on the nursing image.

When occupational and educational characteristics were compared with the professions of the participants (Table 2), it was found that the profession group with the lowest perceived occupational and educational characteristics of nurses was the retirees, and there was a small increase in the measurement during the pandemic in the specified area compared to the pre-pandemic period. The individuals aged 65 and over, one of

the most important risk groups in the coronavirus pandemic, are constantly in contact with others due to their age and health problems, in tandem they have to receive the health care. Even if they stay in institutions such as nursing homes, it has been thought that it is not possible for them to live in isolation from other individuals because they use common living spaces. In addition, most of the elderly individuals may need physical assistance in daily life activities, as well as the treatment and care process, and therefore, they can have frequent contacts with the care personnel (Kosar and Rahman 2021). Considering all these situations, it was expected that the retirees, most of whom were in this age group, demanded more services and education, and therefore, they had an intense demand in terms of occupational and educational characteristics.

The communication, occupational educational and characteristics and the nursing image of nurses were lower during the pandemic than the pre-pandemic period in the eyes of those who said they would not choose the nursing profession and those who said that they would not recommend the nursing profession to anyone from their close circle. Additionally, it was found that these specified areas and the general nursing image during the coronavirus pandemic were negatively affected (Table 3). In a study conducted in Italy, the posts of nurses about coronavirus on social media were examined and one of the themes determined was "Not being able to improve the image of nurses in the society". During the pandemic, part of the community accused nurses of spreading the plague. It has been determined that the nurses tried to defend themselves by saying, "We are not the heroes, but we are not the criminals. We are only the nurses" (Fontanini et al. 2021).

Nurses fight not only diseases that strain other individuals' capacities, but also diseases that pose a risk to them (Tsay et al. 2020). The coronavirus pandemic, which creates a heavy responsibility in terms of treatment and care in the field of health, has also affected healthcare workers in many dimensions (Kutlu 2020; Xu et al. 2020). Nursing is a self-sacrificing profession which provides holistic care in terms of bio-psycho-social aspects and which believes in the sacredness of life and promises hope to the patients

not only in extraordinary situations such as the pandemic processes, but also under the normal conditions. However, both the study conducted in Italy and this study we conducted suggest that the nursing image still does not show the desired improvement, it is perceived as an underestimated and worthless profession. During the coronavirus pandemic, which is a serious crisis moment, it is an expected situation to have negative judgments about the image of nurses fighting for themselves and for people who regard this profession only as a job, who are far from understanding the profession, who do not prefer the profession and do not recommend it.

As a result, the nursing image, which was in average values before the pandemic, decreased during the pandemic. The reasons for this situation can be listed as the fact that the society we live in is not aware of the duties, authorities and responsibilities of the nurse and they are demanding for the duties outside these limits, the workload that occurs during the pandemic which is almost impossible to deal with, the reflection of the inadequacy in nurse employment on the field, and the attribution of it to the nurses. With this study, ideas and findings regarding the effect of the coronavirus pandemic on the nursing image in the society have been presented. At the same time, the need for changing the negative nursing image in the society and constructing a positive image was emphasized.

#### **Research Limitations**

One of the limitations of the research is that it only covers the Turkish community and consists of 398 people. Similar studies can be conducted in different societies and with a larger sample.

# **CONCLUSION AND RECOMMENDATION**

In this study, which was carried out to determine the effect of the coronavirus pandemic on the image of nursing in Turkish society, it was determined that the image of nurses in the society decreased slightly during the pandemic, although not at a significant level compared to the pre-pandemic period. It has been determined that the nursing image of individuals whose gender were male, whose educational level were at primary school or pre-school and high school degree, and who were retired increased slightly during the pandemic compared

to the pre-pandemic period. In line with these results, it has been seen that the effect of coronavirus pandemic on the nursing image of the society was not at the expected level. For this:

- It is recommended that nurses should know their roles, duties and responsibilities and fulfill them accordingly.
- It is necessary to properly present nursing to the society in matters such as the business fields, the working conditions, and the educational levels.
- National policies regarding the nursing mission and vision should be developed.
- Nursing education should be valued in order for sufficiently advancing the nursing profession, which is one of the most important occupations of the future.
- In a difficult process such as the coronavirus pandemic, it should be accurately reflected in the media that the nurses, who are at the forefront and who are away from their family and loved ones, have important roles in this process, they have lost their loved ones, and they have also exhausted.

# **AUTHOR CONTRIBUTION**

Idea/Concept: SK; Design: SK, DA, ÇA, BÇ; Data Collection and/ or Processing: SK, BÇ; Analysis and/or Interpretation: SK, BÇ; Writing the Article: SK, DA, ÇA, BÇ.

#### **CONFLICT OF INTEREST**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

# FINANCIAL DISCLOSURE

The authors received no financial support for the research, authorship, and/or publication of this article.

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