



# Examining the Influence of the COVID-19 Pandemic Process on Nurses and Society's Perception of the Nursing Image

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## Abstract

**Aim:** The purpose of this study was to conduct comparative examination of the influence of the COVID-19 pandemic process on the nursing image perceptions of nurses and individuals forming the society.

**Material and Methods:** This study was carried out using the cross-sectional descriptive research design. The study was conducted online between November 2020 and June 2021 due to the COVID-19 pandemic process. The research sample consisted of 710 people, and the data were collected with the Personal Identification Form and the Nursing Image Scale.

**Results:** The nurses' nursing image scale total score was found to be statistically significantly higher than the scores of the individuals representing the society ( $p < 0.05$ ). On the other hand, it was found that when compared to nurses, individuals representing the society considered nursing more to be a profession and that the pandemic had positively changed nurses' perspective on the nursing profession. In addition, according to the results, the pandemic made the nursing profession visible, and the awareness of the place of the nursing profession in the society increased due to the pandemic. Moreover, the results also showed that nurses considered themselves to be an important member of the health staff as they were always in the field with their caregiver roles ( $p < 0.05$ ).

**Conclusions:** The nursing image mean scores of the nurses and those of the individuals representing the society were found to be highly positive compared to the pre-pandemic period. In the study, it was revealed that the way the nurses did their job professionally was perceived by the society with the COVID-19 pandemic process and that with this rising awareness, the society's perception of the nursing image increased positively. It is recommended that researchers conduct studies on how to further develop the perception of nursing professional image through social media.

**Keywords:** Nurses, nursing image, perception, COVID 19, pandemics, society

## INTRODUCTION

The COVID-19 outbreak originated in China and had a significant impact on nurses due to its spread, mortality rate and care burden (1). It was pointed out that during the COVID-19 pandemic, most nurses had to work in emergency and intensive care units where they had no experience and that this situation caused them to experience many problems (2). Countries were in lockdown with the COVID-19 pandemic, and chronically underfunded healthcare systems were dangerously close to meltdown (3). However, stories of inspiration and innovation as well

as achievements related to the nursing care provided emerged through the pessimism caused by the pandemic (4). Especially nurses constitute more than half of the global healthcare workforce worldwide, and they are regarded as the backbone of the healthcare system (5,6). The knowledge, experience and counseling of the nursing profession has become an important part of the strategy of controlling the pandemic, and the practice of nursing now acts as a basis for the care and survival of patients severely affected by COVID-19 (3). For this reason, it is thought that the image of nursing might have been affected during the COVID-19 process.

## CITATION

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The nursing image has important influence on the development of nursing competence and on the quality of nursing care (7). Nurses' positive and negative perceptions of their public image are related to their self-concept, self-esteem, job satisfaction and their performances. It is also important that nurses, who have an important place in the health system, have a positive perception of themselves and of their profession (8). The opinion of the society about the image of nursing affects the nursing profession, members of the profession and candidates of the profession in a positive or negative way. The society still does not know enough about the contemporary roles and responsibilities, education, and economic and social aspects of the nursing profession. People think that the duties of nurses are only to take blood from the patient, to measure blood pressure and so on (9). The COVID-19 pandemic process will be a period in which the dignity and autonomy of nurses will be revealed with the recognition of the importance of nursing in our country and in the world and with the understanding of its indispensable place in the delivery of health care services (10). It is important to contribute to the reinforcement of the professional identity of nursing, which is considered a critical resource, and to determine and evaluate the image of nursing in terms of its position in the society (11). In one study, it was found important to improve the nursing image perception of the society and the nurses' own professional image perceptions in a positive way in order to increase nurses' job performance and to reduce their intention to quit the job (12). When the literature was examined, no study could be found that compared the nursing image perception of the society and of nurses. In this respect, the purpose of this study was to compare the two groups with respect to the impact of the COVID-19 pandemic process on the nursing image perceptions of nurses and of individuals forming the society.

## MATERIAL AND METHOD

### Research Design

This study was carried out using the cross-sectional descriptive research design.

### Place and Time of the Study

The study was conducted online between November 2020 and June 2021 due to the COVID-19 pandemic process.

### Research Sample

A total of 710 people, who were nurses and individuals in the society, were included in the research sample. In the study, the snowball sampling method, one of the non-probabilistic sampling methods, was used to reach individuals in the society through social media tools. The criteria for inclusion in the sample were volunteering to participate in the study, being 18 years old or older, being literate and being able to communicate. In the study, G\*Power version 3.1 was used for calculating the sample

size (13). At the end of the study, the power of the study was calculated with the G\* Power program using the data obtained in this study. In the G\*Power program, the power of the study was found to be "1" when the effect size was 0.92,  $\alpha=0.05$  and the sample size was 311 for the group of nurses and 399 for the society.

### Data Collection Tools

#### Personal Identification Form

The form was developed by the researchers in line with the related literature. In the form, there were questions regarding the participant's age, gender, the presence of a nurse in the family and so on (14,15).

#### Nursing Image Scale

The scale was developed as a questionnaire by Özsoy (2000), yet its psychometric properties were not examined (16). Later, it was turned into a scale by Çınar and Demir (2009) by conducting its validity and reliability analyses. In order to measure the nursing image of the society, the scale consisted of 28 items regarding the individuals' views about the image of the nursing profession. There were three sub-dimensions in the scale: "Appearance, Communication and Vocational and Educational Qualifications". The internal consistency Cronbach alpha reliability coefficient of the scale was .81. The lowest score to be obtained from the scale was 28, and the highest score was 84. The item-total score correlation values varied between .64-.30. In this study, the total scale score was grouped by the authors as weak (between 28-47 points), moderate (between 46.5-65 points) and high (between 66-84 points) for the evaluation/interpretation of the scale findings more easily. An increase in the total score indicated that the image of nursing was positive (16,17). For this study, the Cronbach alpha value was found to be .86.

### Data Collection Process

The survey forms created with Google forms were shared via social media tools (such as WhatsApp, Instagram, twitter), and those who responded to the survey were asked to share with other people. For each of the items in the Nursing Image Scale, one of the data collection tools, the individuals were expected to evaluate their perceptions during the pandemic process. It took an average of 10 minutes to fill out the questionnaire.

### Analysis of the Research Data

The data were analyzed in computer environment using the statistical software of SPSS 25.0 (IBM SPSS Statistics, Chicago, IL, USA). Student t test and Chi-square analysis for the independent groups were applied for the comparison of the perceptions of the nurses and society regarding nursing and their professional image perceptions during the COVID-19 process. In the study, the statistical significance level for the variables was taken as  $p<0.05$ .

## Research Ethics

In order to conduct the research process, the approval of the non-invasive clinical research ethics committee of the Medicine Faculty of a University was obtained. Moreover, permission from the Turkish Ministry of Health was taken for the present study. In addition, consent of the authors who adapted the scale was obtained. In addition, online consents of the individuals who met the criteria for inclusion in the study and who agreed to participate in the study were taken as well. Permission from the research sample; The consent of the research sample was obtained via the Informed Consent Form, which included information about the purpose of the study, the implementation process, data collection, voluntary participation in the study, the participants' freedom of leaving the research process at any time, and confidentiality of the participants' names.

## RESULTS

The average age of the nurses in the research sample was  $26.28 \pm 7.37$ , while it was  $33.95 \pm 10.73$  for the individuals representing the society. According to the results, 80.7% of the nurses were women; 96.5% had a bachelor's degree or higher; and 58.8% perceived their income as equal to their expenses. The results also showed that in the research sample, 66.9% of the individuals representing the society were women; 79.2% had a bachelor's degree or higher; and 49.1% perceived their income as equal to their expenses (Table 1).

It was revealed that there was news/information attracting the attention of the nurses about any development or difficulties they experienced regarding the nursing profession during the pandemic compared to the individuals in the society and that the sources of their knowledge were social media. Moreover, it was seen that the profession of nursing reminded them of heroes during the pandemic and that they thought nurses were important members of healthcare teams in the pandemic process. Furthermore, they knew it was a year declared by WHO as 'Year of Nursing' ( $p < 0.05$ ). On the other hand, when compared to the nurses, the individuals representing the society thought that the pandemic reminded them of the profession more and that the pandemic changed the viewpoint about the nursing profession positively. Additionally, the pandemic made the nursing profession visible, and the awareness of the place of the nursing profession in the society increased due to the pandemic. Moreover, it was seen that nurses were important members of the healthcare team during the pandemic process as they were always in the field with their caregiver roles ( $p < 0.05$ ). In addition, it was revealed that the nurses' nursing image scale total score was statistically significantly higher than the scores of the individuals representing the society ( $p < 0.05$ ). There was no statistical difference between the nurses and individuals representing the society in terms of the change caused by the pandemic in the viewpoint about the nursing profession ( $p > 0.05$ ) (Table 2).

**Table 1. Examining the introductory characteristics of the nurses and of the individuals in the society (n: 710)**

Variables	Nurses (n: 311) n (%)	Society (Non-health professions/non- working individuals) (n: 399) n (%)
<b>Gender</b>		
Female	251 (80.7)	267 (66.9)
Male	60 (19.3)	132 (33.1)
<b>Educational background</b>		
Literate/elementary school	0 (0)	21 (5.3)
High school	11 (3.5)	62 (15.5)
Bachelor's degree and higher	300 (96.5)	316 (79.2)
<b>Economical situation</b>		
Income lower than expenses	82 (26.4)	121 (30.3)
Income equal to expenses	183 (58.8)	196 (49.1)
Income higher than expenses	46 (14.8)	82 (20.6)
<b>Marital status</b>		
Single	231 (74.3)	192 (48.1)
Married	80 (25.7)	207 (51.9)
<b>Region of accommodation</b>		
Southeast Anatolia region	175 (56.3)	170 (42.6)
Eastern Anatolia region	13 (42.0)	14 (3.5)
Central Anatolia region	21 (6.8)	46 (11.5)
Marmara region	16 (5.1)	41 (10.3)
Aegean region	15 (4.8)	49 (12.3)
Mediterranean region	66 (21.4)	70 (17.5)
Black Sea region	5 (1.6)	9 (2.3)
<b>Having an acquaintance around who is a nurse</b>		
Yes	264 (84.9)	326 (81.7)
No	47 (15.1)	73 (18.3)
<b>Having received a nursing service before</b>		
Yes	250 (80.4)	242 (60.7)
No	61 (19.6)	157 (39.3)
<b>Previous companionship</b>		
Yes	228 (73.3)	309 (77.4)
No	83 (26.7)	90 (22.6)
	$\bar{x} \pm SS$ (Min-Max)	$\bar{x} \pm SS$ (Min-Max)
Age	$26.28 \pm 7.37$ (18.00-56.00)	$33.95 \pm 10.73$ (18.00-66.00)

Table 2. Comparison of the mean scores of the nurses and individuals in the society regarding the nursing image scale and its sub-dimensions and their views about the nursing profession during the COVID-19 pandemic period (n:710)			
Views about the nursing profession	Nurses (n: 311) n (%)	Society (Non-health professions/ individuals) (n: 399) n (%)	Test; p value
<b>News/information drawing their attention about any development or difficulties experienced in relation to the nursing profession during the pandemic.</b>			
Yes	287 (92.3)	345 (86.5)	$\chi^2=6.047$ p=0.014
No	24 (7.7)	54 (13.5)	
<b>*Source of news/information</b>			
Social media	184 (59.2)	231 (57.9)	$\chi^2=22.419$ p=0.000
Press releases of professional organizations	64 (20.6)	40 (10.0)	
Television	63 (20.3)	128 (32.1)	
<b>What the profession of nursing reminded of before the pandemic?</b>			
Profession of caregiving	88 (28.3)	44 (11.0)	$\chi^2=45.595$ p=0.000
An overburdened and exploited profession	3 (1.0)	2 (0.5)	
doctor's assistant	43 (13.8)	102 (25.6)	
Hero	23 (7.4)	29 (7.3)	
Sister	1 (0.3)	9 (2.3)	
Profession	153 (49.2)	213 (53.4)	
<b>What the profession of nursing reminded of during the pandemic?</b>			
Profession of caregiving	52 (16.7)	27 (6.8)	$\chi^2=44.787$ p=0.000
An overburdened and exploited profession	13 (4.2)	2 (0.5)	
Doctor's assistant	12 (3.9)	48 (12.0)	
Hero	173 (55.6)	217 (54.4)	
Sister	2 (0.6)	7 (1.8)	
Profession	59 (19.0)	98 (24.6)	
<b>Willingness to become a nurse before the pandemic</b>			
Yes	162 (52.1)	122 (30.6)	$\chi^2=89.196$ p=0.000
I never wanted	44 (14.1)	182 (45.6)	
I'm undecided	53 (17.0)	67 (16.8)	
I wanted to before the pandemic, but I don't want it now	52 (16.7)	28 (7.0)	
<b>The pandemic changing the viewpoint about the nursing profession *</b>			
Changed	174 (56.0)	222 (55.6)	$\chi^2=0.073$ p=0.964
Partly changed	53 (17.0)	71 (17.8)	
No change	84 (27.0)	106 (26.6)	
<b>***Is the change in the viewpoint about the nursing profession positive due to the pandemic?</b>			
Yes	130 (62.2)	220 (81.2)	$\chi^2=54.948$ p=0.000
No	60 (28.7)	12 (4.4)	
Partly	19 (9.1)	39 (14.4)	
<b>Thinking that the pandemic made the nursing profession visible</b>			
Yes	192 (61.7)	290 (72.7)	$\chi^2=23.586$ p=0.000
No	54 (17.4)	24 (6.0)	
Partly	65 (20.9)	85 (21.3)	
<b>Thinking that awareness of the place of the nursing profession in the society has increased due to the pandemic.</b>			
Yes	108 (34.7)	216 (54.1)	$\chi^2=47.118$ p=0.000
No	87 (28.0)	39 (9.8)	
Partly	116 (37.3)	144 (36.1)	
<b>Thinking that the nurse is an important member of the healthcare team during the pandemic process.</b>			
Yes	301 (96.8)	370 (92.7)	$\chi^2=5.530$ p=0.019
No	10 (3.2)	29 (7.3)	
<b>The reason why the nurse is an important member of the healthcare team during the pandemic process</b>			
The burden they take is too much, and they are responsible for caregiving	14 (6.1)	16 (6.1)	$\chi^2=25.672$ p=0.019
They were always in the field with their caregiver roles	163 (71.2)	200 (76.3)	
They worked at the cost of their lives	8 (3.5)	29 (11.1)	
They worked in close contact with patients	44 (19.2)	17 (6.5)	
<b>Knowing that 2020 was declared as the 'Year of Nursing' by the World Health Organization</b>			
Knows	237 (76.2)	181 (45.4)	$\chi^2=68.664$ p=0.000
Does not know	74 (23.8)	218 (54.6)	
	<b>Mean±SD</b>	<b>Mean±SD</b>	<b>Test; p value</b>
Nursing image scale total score	74.14±6.60	68.15±7.98	t=10.935* p=0.000

\*Chi-square analysis, \*\* student t-test for independent groups, \*\*\* those reporting a change in viewpoint responded



## DISCUSSION

### Nurses' Image Perception

In the study, it was found that there was news/information attracting the attention of nurses about any development or difficulties they experienced regarding the nursing profession during the pandemic compared to the individuals in the society. In addition, it was revealed that the sources of their knowledge were social media and that the profession of nursing reminded them of heroes during the pandemic. Furthermore, they thought nurses were important members of a healthcare team in the pandemic process, and they knew it was a year declared by WHO as 'Year of Nursing'. In their study, O'Leary, et al. (2021) examined the tweets shared by 2790 people and by various organizations during the COVID-19 pandemic. In the study, it was revealed that in addition to the disseminating information, nurses tried to reach political and health service leaders through social media in order to solve the problems experienced during the COVID-19 process (18). The problems experienced during the COVID-19 pandemic exposed nurses to psychological stress, burnout, depression and so on (19,20). On the other hand, the expression of the problems experienced by nurses in the media and the search for solutions to the problems experienced by the relevant professional organizations left their mark on the media (21,22-25). Many artistic images of the courage and sacrifices of nurses during the COVID-19 pandemic were shared on social media, and they became a legend in the war against Corona (23). The reason for this situation is thought to be because the nurses were at the forefront of the war against the COVID-19 pandemic because the health institutions lacked the necessary material and/or staff as well as because there were nurse deaths during their efforts for solving the problems they experienced and for following up the situation.

The total score of the nurses in the nursing image scale was found to be statistically significantly higher than the scores of the individuals representing the society ( $p < 0.05$ ). In many studies examining the professional image perceptions of nurses before the pandemic, it was revealed that the image perception of the nurses compared to the society was moderately positive (15, 26-28). Takase, Maude & Manias, (2006), in their study, found that the nurses' perception of professional leadership and professional image was more positive than the perception of society. As the nurses' perception of professional image increased, there was an increase in their job performance and a decrease in their intention to quit the profession (26). In a study conducted with nursing intern students during the pandemic, it was seen that they had moderate levels of professional image perceptions (29). In the present study, it was found that during the COVID-19 process, the nurses had high levels of professional image perceptions ( $74.14 \pm 6.60$ ), which were statistically more positive when compared to the society's nursing image perception. In a study, it was reported that the nurses involved in the

care of COVID-19 patients had a significantly higher level of professional identity when compared to the nurses who did not give care to COVID-19 patients (30). In a qualitative study examining the nurses' perceptions of professionalism in the COVID-19 process through their social media accounts, one of the nurses stated that "We are nurses, and we have a major role in educating people about COVID-19", while another nurse pointed out that "Patients with corona are terrified and anxious, and it is our responsibility to stand with them during this difficult time." In the present study carried out via social media, it was seen that despite the difficulties brought about by COVID-19, the nurses acted professionally by being conscious of the COVID-19 process and of their professional responsibility for their patients (31). In a study, it was found that the nursing students who chose the nursing profession voluntarily had more positive perceptions of professional image when compared to the students who chose the nursing profession unwillingly (32). In this study, it was thought that there were two reasons why the professional image perception scores of the nurses were statistically significantly higher when compared to those of the society. One of these reasons could be the fact that the COVID-19 pandemic developed/increased the professional identity of the nurses, and another reason might be the fact that more than half of the nurses participating in the study chose the profession willingly (Table 2).

### Image Perception of the Society

It was found that nursing reminded the individuals representing the society of the profession to a higher extent before the pandemic when compared to the nurses and that the society perceived the nursing image perception highly positively. In literature, there are several studies conducted to examine the society's perception of the nursing image before the pandemic in Turkey. Some studies revealed that the society had moderately positive perceptions regarding the nursing image (12,15,33), while some other studies demonstrated that the society had negative perceptions regarding the nursing image (34). In a study carried out by Tan, Yuncu, Şentürk & Yıldız (2007), the negative perception of the nursing image might be due to the sample difference. In another study conducted with the same scale used in this study in Turkey before the pandemic, it was found that the society perceived the professional image of nursing as moderately positive (35). In another study carried out by Şahan, Yıldız, & Ergin (2021), who evaluated the society's perception of nursing image via the social media tool of Twitter, it was revealed that 373 tweets about the nursing profession were shared before the pandemic and that 35.65% of these tweets contained positive messages, while 64.35% contained negative messages. On the other hand, it was found that 1006 tweets were shared during the COVID-19 pandemic and that 91.94% of these tweets included positive messages while the remaining 8.06% contained negative messages (36). In this study, it was found that the society's

perceptions of the nurses' professional image during the COVID-19 pandemic were perceived highly positive, similar to the results reported in related literature.

Other findings related to the society's perception of nursing professional image were as follows: The pandemic changed the society's viewpoint about the nursing profession; the pandemic made the nursing profession visible; awareness of the place of the nursing profession in the society increased due to the pandemic; and nurses became important members of health teams during the pandemic because they were always in the field with their caregiver roles. One of the methods used in the promotion of a profession in image studies is the media (37,38). In a study examining the status of nursing in the media, all the nursing-related news, web-based publications and press releases in English on an international scale on 18 March-18 April 2020 reached by using the keyword of "nursing" were compared with those published in the same period in 2019. The comparison revealed that the news about nursing increased almost three times in the media in the stated time period in 2020 (39). In a study conducted by Ateş, Önal, Çolak and Öztürk (2021), news about healthcare workers during the COVID-19 pandemic was examined. In addition, news about the appreciation of health staff and news about the positive social image constituted 18.64% of the content of the news about the social image of health staff. When the details of the news about professional image were examined, it was seen that there were statements including positive image elements and appreciation of health staff like "...Turkey applauded and thanked the healthcare workers fighting the coronavirus on the frontline...", "... No words can summarize the efforts of the doctors, nurses and other health personnel who did their best day and night during our ongoing treatment and healed us...", "...We would like to express our gratitude to our healthcare workers who sacrificed their lives for our families and beloved we left behind, while we are here on the homeland watching..." (24). Similarly, in this study, it was found that the society's viewpoint about the nursing profession changed positively with the pandemic. The reason for this positive change might be the increased awareness of the society with the news shared in the media together with the pandemic.

## CONCLUSION

It was found that the nurses and the individuals representing the society had extremely high mean scores regarding the image of nursing when compared to the pre-pandemic period. In addition, the nurses had statistically significantly higher image mean scores than the individuals representing the society. In this study, it was revealed that there was news/information attracting the attention of nurses about any development or difficulties they experienced regarding the nursing profession during the pandemic compared to the individuals in the society. The other findings related to the society's perception of nursing professional image revealed that the pandemic changed the society's viewpoint about the nursing

profession positively, made the nursing profession visible and increased the awareness of the place of the nursing profession in the society. The findings also showed that nurses were thought to be important members of health teams during the pandemic as they were always in the field with their caregiver roles. Accordingly, as the nursing image perceptions of nurses and of the society are important in terms of their job performance, motivation and intention to quit their job, countries could take effective initiatives concerning the media (public advertisements, social media, and so on) to improve nurses' professional image perceptions. In addition, attempts should be made to ensure that nursing professional organizations play an active role in the legislative proposals related to nursing in order to improve nursing services.

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**Ethical approval:** *In order to conduct the research process, the approval of the non-invasive clinical research ethics committee of the Medicine Faculty of a University was obtained (dated 25.02.2021, number 140). Moreover, permission from the Turkish Ministry of Health was taken for the present study (dated 10.01.2021, with the form name of 2021- 01-08T12\_05\_28).*

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