Nursing students' professional image in the Covid-19 pandemic in Turkey: A cross-sectional study

Makbule Batmaz PhD | Havva Gezgin Yazici PhD | Latife Utaş Akhan

1Haliç University Nursing Department, Istanbul, Turkey
2Mental Health Nursing Department, Faculty of Health Sciences, Kutahya Health Sciences University, Kutahya, Turkey
3Mental Health Nursing Department, Bandırma On Yedi Eylül University, Balıkesir, Turkey

Abstract

Background: Nursing students' professional perceptions are affected by the environment they live in. Nursing students think that the nursing profession is important during the pandemic.

Purpose: This descriptive, cross-sectional study was conducted to determine the nursing students' professional image perceptions and the affecting factors during the Covid-19 pandemic in Turkey.

Methods: The research population consisted of all nursing students (N = 750) of two universities in Turkey. The research data were collected using a personal information form and the Scale for the Image of Nursing Profession (SINP).

Results: Of the students, 76.4% were not infected with Covid-19, 30.8% had an individual in their family infected with Covid-19; 34% had an immediate family member who died of Covid-19; 99.4% thought that the nursing profession is important during the Covid-19 pandemic. A statistically significant difference was found between the place where the students live and the SINP (p < .05).

Conclusion: The students' image perceptions toward the nursing profession were found to be at a good level. This indicates that image perception toward nursing profession has increased during the pandemic. It can be said that the place where the students are in the pandemic process and their thoughts about the nursing profession affect their professional image perceptions.

KEYWORDS
Covid-19, nursing, professional image, student

INTRODUCTION

Nurses work to protect, maintain and develop the health of individuals, families, and societies all over the world. Playing a significant role in carrying out healthcare services, nursing constitutes a keystone of the healthcare system in providing quality care. Medical treatment is not sufficient alone, therefore training nurses, who are specialized in their area, have the ability to think critically, and have developed problem solving skills, is necessary for all societies to acquire the importance of the protective health into the society and to reduce healthcare costs.1

As a profession, nursing is influenced by education, professional skills, ethical values, and social structures that the nurses provide care for.2 Students' perceptions regarding a profession are effective for them to choose that profession and make their career accordingly. Nursing students receive theoretical and practical education for many years to be able to fulfill their profession. Undergraduate nursing education began in 1955 in Turkey. Today, the number of universities providing nursing education in higher education has reached 124.3 During 4 years of nursing education, together with theoretical courses, students receive practical education in the field. Master's degrees in nursing were offered for the first time in 1968 and the
What are the factors affecting the professional image perceptions toward their profession during the Covid-19 pandemic?

2 | METHODS

2.1 | Research population and sample

The research population consisted of all nursing students (N = 750) of two universities in Turkey. Nursing education includes 4 years of education. It was aimed to reach all students studying in this department. Using the sample formula, the required sample size for this population, which is not in a homogeneous structure, is within the 95% confidence interval, with a sampling error of ±5%. n = 750 (1.96) 2 (0.2) (0.8) = 138 was calculated as. The study was carried out between March 13 and April 20, 2021 with 474 students who accepted to participate in the study. The data were collected with the “personal information form” and “the Scale for the Image of Nursing Profession (SINP)” prepared through Google forms. The questionnaire link was sent to the participants via institutional e-posta adress. By receiving and clicking the link, the participants were automatically directed to the information of the study and the consent form. After accepting to participate, the personal information form and the SINP form were filled out. The participants who studied in the nursing department and volunteered to provide informed consent were included in the study.

2.2 | Data collection tools

2.2.1 | Personal information form

The form, which was prepared by the researcher on the basis of literature review, includes sociodemographic characteristics and 15 questions.1,6,11

2.2.2 | SINP

Developed by Dost and Bahçecekl,17 this scale consists of 42 items and six subdimensions that are Professional Qualities (11 items), Working Conditions (10 items), Gender (8 items), Education (5 items), Professional Status (5 items), and Appearance (3 items). The Lawshe technique was used to determine content validity rates. Explaining 63.59% of the total variance after factor analysis. It was observed that 42 items were collected in 6 subdimensions. It is a 5-point-Likert-type scale, with the statements of "definitely agree" (5) and "definitely disagree" (1). The minimum obtainable score from the scale is 42, and the maximum is 210. While a score of 42–75 indicates a very weak image perception, 76–109 indicates weak, 110–143 moderate, 144–177 good, and 178–210 very good image perception. As the score from the scale increases, the professional image perception increases accordingly. Cronbach’s α coefficient, which was .91 in the original validity and reliability study of the scale,17 was found to be .87 in this study.
2.3 | Data analysis

Data analysis was done using the SPSS 20.0 software. To evaluate the data, frequency, percentage, mean, and standard deviation, the Mann–Whitney U and Kruskal–Wallis tests were used. For the results, \( p < .05 \) was accepted as statistically significant.

Data analysis was performed with IBM SPSS 22 program. Descriptive statistics, mean and standard deviation for continuous variables; for categorical variables, it is presented as frequency and percentage. It was determined that the scores obtained from the scale and its subdimensions did not show normal distribution. For this reason, Mann–Whitney U-test was used in paired group comparisons and Kruskal–Wallis test was used in comparisons with more than two groups. Statistical significance value was taken as \( p < .05 \).

2.4 | Ethical considerations

To conduct the research, Ethics Committee Approval (date: 3.12.2021 with the decision number of 2021-6) from the Non-invasive Clinical Research Ethics Committee of the related university and written consent through online forms were obtained from the students who participated in the research.

3 | RESULTS

The SINP mean score of the students was found to be 167.36 ± 15.78. The scale's subdimension scores are presented in Table 1.

Of the students, 29.5% (\( n = 140 \)) were 20 years old; 81% (\( n = 384 \)) were female and 19% (\( n = 90 \)) were male; 85.2% (\( n = 405 \)) lived with their family and 7.8% (\( n = 37 \)) lived in the dormitory; 20% (\( n = 95 \)) had an income less than their expenses and 57.3% (\( n = 319 \)) had an income equal to their expenses; 82.3% (\( n = 390 \)) had a nuclear family structure; 37% (\( n = 177 \)) had one sibling; 67.5% (\( n = 320 \)) graduated from an Anatolian high school and 18.6% (\( n = 88 \)) graduated from a vocational school of health. Of them, 90.3% (\( n = 428 \)) did not have any diagnosed physical disorders; 76.4% (\( n = 362 \)) were not infected with Covid-19, whereas 30.8% (\( n = 146 \)) had an individual in their family infected with Covid-19; 10.8% (\( n = 51 \)) were employed; 34% (\( n = 161 \)) had an immediate family member who died of Covid-19; and 99.4% (\( n = 471 \)) thought that the nursing profession is important during the Covid-19 pandemic (Table 2).

A statistically significant correlation was found between the scale total scores and the place lived (\( p < .05 \)) among the groups of students at home with their family, at home with their relatives, at home with their friends, at home alone, or in the dormitory. While the total scale scores of those who stayed at home with their friends were the highest (171.07 ± 21.06), the mean score of those who stayed at home with their relatives was the lowest (133.33 ± 35.06). The scale total score became statistically significant with the thought that the nursing profession is significant during the Covid-19 pandemic; and the mean score of those who gave the answer "yes" to the question "Do you think the nursing profession is important during the Covid-19 pandemic?" was found to be higher (\( p < .05 \)) (Table 3).

No statistical significance was found between working conditions, gender, professional status, and appearance with the thought that the nursing profession is important during the Covid-19 pandemic (\( p > .05 \)). The subdimension of professional qualities had statistical significance with the thought that the nursing profession is important during the Covid-19 pandemic (\( p < .05 \)); and the mean score of the individuals who gave the answer "yes" to the question was found to be higher (51.43 ± 5.25). The gender, education, and scale total score had statistical significance with the thought that the nursing profession is important during the Covid-19 pandemic, and the mean score of those who gave the answer "yes" to the question was found to be higher (\( p < .05 \)) (Table 4).

4 | DISCUSSION

The obtainable scores from the SINP range between 42 and 210. While a score of 42–75 indicates a very weak image perception, 76–109 indicates weak, 110–143 moderate, 144–177 good, and 178–210 very good image perception. In this study, the SINP mean score was at a good level at 167.36 ± 15.78. In other studies, the SINP mean score was found at a moderate level.14,16,17,10,11 It is clear that image perception toward the nursing profession has increased during the Covid-19 pandemic. Nurses who have fought against time with the day-to-day increase in case numbers throughout the Covid-19 pandemic have played an effective role in providing holistic healthcare to help in the recovery of their patients.14 All around the world, nurses have been regarded as the heroes of the pandemic, and their importance has increased in the society.16

The characteristics of the nursing profession are influenced by working conditions, education, gender, professional qualities, professional status, and appearance. As healthcare professionals, nurses need to have some qualifications to successfully fulfill their professional...
roles. These qualifications include having scientific knowledge, being able to apply therapeutic communication, creativity and being able to think critically. In this study, the professional qualities subdimension had the highest mean among the subdimensions. In the development of students’ image perceptions regarding the nursing profession, professional qualities are considered important. It is seen that after the "professional qualifications" subdimension, the "working conditions" subdimension and then the "education" subdimension received high scores. In other studies, the subdimension of professional qualities was higher in the constitution of professional image perception.7,10

This study showed that the score of appearance subdimension was lower compared to other subdimensions of SINP. In the studies conducted, nurses were expected to be cheerful, well-groomed, and polite.18,19 In terms of the subdimension of appearance, nurses’ characteristics such as cheerfulness and being well-groomed did not leave sufficiently positive impressions on the students during their observation.

The SINP mean scores of female and male students were found to be similar. This indicates that perceptions of male students regarding the nursing profession have changed and they do not regard nursing as a female profession, which is supported by the studies conducted in recent years.20,21 Examining the number of students in the Council of Higher Education, there is an increasing number of male students who continue their nursing education.

| TABLE 2 | Personal characteristics of students (N = 474) |
| --- | --- |
| **Personal characteristics** | **n** | **%** |
| **Age** | | |
| 18 or younger | 35 | 7.4 |
| 19 | 103 | 21.7 |
| 20 | 140 | 29.5 |
| 21 | 93 | 19.6 |
| 22 or older | 103 | 21.7 |
| **Gender** | | |
| Female | 384 | 81.0 |
| Male | 90 | 19.0 |
| **Where do you live?** | | |
| At home with my family | 405 | 85.4 |
| At home with my friends | 13 | 2.7 |
| In the dormitory | 37 | 7.8 |
| At home with my relatives | 6 | 1.3 |
| At home alone | 13 | 2.7 |
| **Perceived income level** | | |
| Income is less than expenses | 95 | 20.0 |
| Income is equal to expenses | 319 | 67.3 |
| Income is higher than expenses | 60 | 12.7 |
| **Family type** | | |
| Nuclear family | 390 | 82.3 |
| Extended family | 72 | 15.2 |
| Fragmented family | 11 | 2.3 |
| Missing data | 1 | 0.2 |
| **Number of siblings** | | |
| I do not have any siblings | 13 | 2.7 |
| One sibling | 177 | 37.3 |
| Two siblings | 137 | 28.9 |
| At least three siblings | 147 | 31.0 |
| **Type of the school graduated** | | |
| Vocational school of health | 88 | 18.6 |
| Science high school | 25 | 5.3 |
| Anatolian high school | 320 | 67.5 |
| Other | 41 | 8.6 |
| **Is there anyone from your immediate family who works as a nurse?** | | |
| Yes | 245 | 51.7 |
| No | 229 | 48.3 |
| **Do you have any diagnosed physical disorders?** | | |
| Yes | 46 | 9.7 |
| No | 428 | 90.3 |

| TABLE 2 (Continued) | | |
| **Personal characteristics** | **n** | **%** |
| Have you been infected with Covid-19? | | |
| Yes | 48 | 10.1 |
| No | 362 | 76.4 |
| I don’t know | 64 | 13.5 |
| Do you have anyone in your family who has been infected with Covid-19? | | |
| Yes | 146 | 30.8 |
| No | 328 | 69.2 |
| **Are you employed?** | | |
| Yes | 51 | 10.8 |
| No | 423 | 89.2 |
| Do you have any immediate family member who died of Covid-19? | | |
| Yes | 161 | 34.0 |
| No | 313 | 66.0 |
| **Do you think the nursing profession is important during the Covid-19 pandemic?** | | |
| Yes | 471 | 99.4 |
| No | 3 | 0.6 |
| **Total** | 474 | 100.0 |
While the number of students who studied in the nursing faculties was 3072 in the 2018–2019 academic year, it increased to 3535 in the 2019–2020 academic year. The environment where the students lived during their education affected their image perceptions toward the nursing profession. These perceptions were found to be higher for the students who share a house with their friends compared to the students who lived with their relatives. Therefore, we can say that living with friends can positively affect individuals' image perceptions of the nursing profession. The nursing education process contributes to the students' nursing profession image perception in a positive way.22

Considering the nursing profession important during the Covid-19 pandemic has influenced image perception toward the nursing profession. The studies conducted have found that students' professional identity perception levels have increased during the Covid-19 pandemic, which has positively influenced the image of the nursing profession.23,24 During the pandemic,
the media presenting the work of nurses and governments’ efforts have increased the visibility of nurses all over the world and contributed to the image of nursing. In Turkey, nurses have been able to raise their voice through nursing associations and social media. The Turkish Nurses Association has closely followed the Covid-19 pandemic at the national and international level, and has become effective in solving the problems that nurses have faced with during the management of the process.25,26

| TABLE 4 | The variation of SINP scores according to the thought of the nursing profession to be important during the Covid-19 pandemic |
|---------|------------------------------------------------------------------------------------------------------------------|
| N   | Mean  | SD    | p     |
|------------------|-------|-------|-------|
| Professional qualities |  |       |       |       |
| Yes   | 471   | 51.433 | 5.25188 |       |       |
| No    | 3     | 41.667 | 5.03322 | .007* |       |
| Total | 474   | 51.371 | 5.30241 |       |       |
| Working conditions   |      |       |       |       |
| Yes   | 471   | 43.788 | 4.69059 |       |       |
| No    | 3     | 40.000 | 4.35890 | .092  |       |
| Total | 474   | 43.764 | 4.69392 |       |       |
| Gender      |      |       |       |       |
| Yes   | 471   | 20.531 | 5.55194 |       |       |
| No    | 3     | 18.667 | 3.21455 | .554  |       |
| Total  | 474   | 20.519 | 5.54023 |       |       |
| Education      |      |       |       |       |
| Yes   | 471   | 22.618 | 3.04408 |       |       |
| No    | 3     | 15.000 | 7.93725 | .015* |       |
| Total  | 474   | 22.564 | 3.13684 |       |       |
| Professional status |  |       |       |       |
| Yes   | 471   | 17.331 | 4.66502 |       |       |
| No    | 3     | 15.333 | 5.13160 | .424  |       |
| Total  | 474   | 17.318 | 4.66486 |       |       |
| Appearance   |      |       |       |       |
| Yes   | 471   | 11.832 | 2.57308 |       |       |
| No    | 3     | 11.000 | 1.73205 | .444  |       |
| Total  | 474   | 11.827 | 2.56823 |       |       |
| Scale total |      |       |       |       |
| Yes   | 471   | 167.533 | 15.69329 |       |       |
| No    | 3     | 141.667 | 9.50438 | .007* |       |
| Total  | 474   | 167.369 | 15.78974 |       |       |

Note: Test: Mann–Whitney U, *and bold values denote statistically significant p < .05.
Abbreviation: SINP, Scale for the Image of Nursing Profession.

5 | LIMITATIONS

This study was conducted with the students who studied in the nursing departments of two universities in Turkey which is the limitation of the research. Evaluation of the findings of this study should consider that its sample was an online sample of individuals who have access to the internet, and consists of students who have more social connections, even if they are virtual.

6 | CONCLUSIONS

The image perception of nursing students toward the nursing profession was found to be at a good level. It is clear that image perception toward the nursing profession has increased during the Covid-19 pandemic. In the development of students’ image perceptions regarding the nursing profession, professional qualities are considered important. The Covid-19 pandemic is not only a crisis but also an opportunity for nursing students to increase their professional image. Student nurses are recommended to behave professionally while providing care to their patients and promote their professional and personal developments by continuous reading.

In order for the nursing profession to take its rightful place in the future, it is important to improve the nursing students’ self-conceptions, and develop strategies to contribute to their professional image perceptions in the society in a positive way.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author Havva Gezgin YAZICI on behalf of all authors upon reasonable request.

ORCID

Makbule Batmaz http://orcid.org/0000-0003-1856-6793
Havva Gezgin Yazici http://orcid.org/0000-0001-8422-9686
Latife Uta Akhan http://orcid.org/0000-0001-6423-3186

REFERENCES

1. Rodríguez-Gázquez MLÁ, Basurto Hoyuelos S, González-López JR. Countries’ cultures and professional nursing values: cross-cultural evidence from Spanish and Colombian nursing students. Nurse Educ Pract. 2021;50:102953. doi:10.1016/j.nepr.2020.102953
2. Marcinowicz L, Andersson EK, Bohman DM, et al. Nursing students’ perception of the professional nurse’s role in four European Countries. Int Nurs Rev. 2019;66(2):250–258.
3. İbrahimoğlu Ö, Mersin S, Saray Kılç H. Nursing education curriculum and learning outcomes. J Higher Educ. 2019;9(1):12-16.
4. Bahar Z, Aydoğan N. Doctorate programs in nursing and providing its standardization. J Public Health Nurs. 2019;1(1):54-63.
5. Özkütük N, Orgun F, Akçaökoz B. General situation report about the higher education institutes providing nursing education in Turkey. J Higher Educ. 2018;8(2):150-157.
6. Bulut A, Çelik G, Yanik R. Determining nursing students career orientation factors and views of professional image and expectations. Gen Med J. 2020;30(4):209-217.

7. Kızılçık-Özkan Z, Ünver S, Avıcıbaşı IM, Semerci R, Yıldız-Fındık Ü. Professional image perception of a group of nursing students. J Res Dev Nurs. 2017;19(1):38-47.

8. ten Hoeve Y, Jansen G, Roodbol P. The nursing profession: public image, self-concept and professional identity. A discussion paper. J Adv Nurs. 2014;70(2):295-309. doi:10.1111/jan.12177

9. Hung CA, Wu PL, Liu NY, Hsu WY, Lee BO, Pai HC. The effect of gender-friendliness barriers on perceived image in nursing and caring behaviour among male nursing students. J Clin Nurs. 2019;28(9-10):1465-1472.

10. Karaman F, Çakmak S, Yerebakan AN. Professional image perceptions of nursing students and determining affecting factors. Istanbul Gelisim Univ J Health Sci. 2020;11:217-229.

11. Seval M, Sönmez M. Relationship between the attitudes and image perceptions of nursing students' profession. Health Acad Kastamonu. 2020;5(1):19-36. doi:10.25279/sak.481182

12. Yılmaz Kuşaklı B, Yerköy Ateş A, Çetin G. Intergenerational change of nursing profession and management of generations. Unıv Health Sci J Nurs. 2019;1(3):203-208.

13. Duygulu S, Başaran Açıl S, Kuruca Özdemir E, Erdat Y. COVID-19 and nurse managers’ responsibilities. J Hacettepe Uni Faculty Nurs. 2020;7:34-46. doi:10.31125/hunhemsire.776215

14. Chen SC, Lai YH, Tsay SL. Nursing perspectives on the impacts of COVID-19. J Nurs Res. 2020;28(3):e85. doi:10.1097/NRJ.0000000000000389

15. Arslan S, Aydındürü N. New coronavirus disease, it’s prevention, protection measures and roles of nurse’s in treatment. J Health Sci. 2020;6(1):120-127.

16. Çelik ŞŞ, Özbaş AA, Çelik B, et al. The COVID-19 pandemic: Turkish nurses association. J Educ Res Nurs. 2020;17(3):279-283. doi:10.5222/kuhead.2020.34603

17. Dost A, Bahçecik AN. Developing A scale for the image of nursing profession. J Acad Res Nurs. 2015;1(2):51-59.

18. Hermann RM, Long E, Trotta RL. Improving patients’ experiences communicating with nurses and providers in the emergency department. J Emerg Nurs. 2019;45(5):523-530. doi:10.1016/j.jen.2018.12.001

19. Özdelikara A, Boğa NM, Çayan N. Nursing image from the view of nursing students and other section students. J Duze Univ Health Sci Inst. 2015;5(2):1-5.

20. Ünver S, Avıcıbaşı IM, Özkan ZK, Motör D. Problems in the social environment of male students’ who study in nursing department. J Hum Soc Sci Res. 2016;5(6):1636-1648.

21. Ibrahim AF, Akel DT, Alzghoul HWM. Image of nursing profession as perceived by Egyptian and Jordanian undergraduate male nursing students: a comparative study. J Educ Pract. 2015;6(14):24-36.

22. Atasoy I, Ermin C. An investigation on the professional perspectives of the nursing and midwifery students. J Duze Univ Health Sci Inst. 2016;6(2):83-91.

23. Zhang Z, Fu W, Tian C, et al. Professional identity of Chinese nursing students during the COVID-19 pandemic outbreak: A nation-wide cross-sectional study. Nurse Educ Pract. 2021;52:103040. doi:10.1016/j.nepr.2021.103040

24. Shengxiao N, Chao S, Lei W, Xia W. The professional identity of nursing students and their intention to leave the nursing profession during the coronavirus disease (COVID-19) pandemic. J Nurs Res. 2021;29(2):e139. doi:10.1097/jnrj.0000000000000424

25. Kiyat İ, Karaman S, İçcan Ataşen G, Elkan Kiyat Z. Nurses in the fight against the novel coronavirus (COVID-19). J Turk Nurses Assoc. 2020;1(1):81-90.

26. Marcinowicz L, Owłasiuk A, Slusarska B, Zarzycka D, Pawlikowska TB. Choice and perception of the nursing profession from the perspective of polish nursing students: a focus group study. BMC Med Educ. 2016;16:243. doi:10.1186/s12909-016-0765-3

How to cite this article: Batmaz M, Gezgin Yazıcı H, Utaş Akhan L. Nursing students' professional image in the Covid-19 pandemic in Turkey: A cross-sectional study. Nurs Forum. 2022;1-7. doi:10.1111/nuf.12765