Evaluation of moral sensitivity and moral courage in intensive care nurses in Turkey during the COVID-19 pandemic

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Abstract

Background: During the COVID-19 pandemic, intensive care nurses may experience ethical issues related to fear of transmission, limited resources, and increased workload. Nurses' moral sensitivity and courage may have a role in dealing with these problems.

Aim and Objective: The purpose of this study was to assess intensive care nurses' moral sensitivity and moral courage during the COVID-19 pandemic.

Design: Descriptive cross-sectional survey.

Methods: A total of 362 nurses working in the intensive care units of pandemic hospitals in Turkey participated in the study between January and March 2021. Data were obtained using a personal information form, the Moral Sensitivity Questionnaire, and the Nurses' Moral Courage Scale. A link to the online data collection tools was sent to the management of participating institutions, who forwarded it to nurses. Reporting followed the CHERRIES guidelines.

Results: In this study, the response rate of nurses was 89%. The nurses' total mean moral sensitivity score was 90.70 ± 28.89 and their mean moral courage score was 82.08 ± 13.51. A weak inverse correlation was found between the nurses' moral sensitivity and moral courage scores (r = -.176, p = .001). Total moral sensitivity score differed significantly according to years of Intensive care unit (ICU) experience (p = .007). Total moral courage scores increased significantly with education level (p = .012), years of nursing experience (p = .016), and willingness to work in the ICU (p < .001).

Conclusion: The study suggests that nurses working in the intensive care unit during the pandemic had moderate moral sensitivity and high levels of moral courage. Nurses' sociodemographic characteristics and ICU work conditions may affect their moral sensitivity and moral courage.

Relevance to Clinical Practice: The results of this study can help guide efforts to improve moral courage and sensitivity and address ethical issues among ICU nurses.

KEYWORDS
COVID-19, intensive care, moral courage, moral sensitivity, nursing
1 | INTRODUCTION

Intensive care admissions increased dramatically during the COVID-19 (coronavirus disease 2019) pandemic, which in turn increased nurses' responsibilities and care burden. Although nursing always involves ethical decision-making, the difficult conditions imposed by the pandemic have forced nurses to face such situations more frequently. As a result, the principles of moral sensitivity and moral courage have become even more important in nursing care.

2 | BACKGROUND

Moral sensitivity is a fundamental component of ethical action and determines a person's capacity in ethical decision-making. Moral sensitivity, or the ability to recognize moral situations, is a prerequisite for acting with moral courage. In nursing, moral sensitivity fosters a nurse–patient connection based on trust and responsiveness to the patient's individual needs. A high level of moral sensitivity allows nurses to feel prepared to cope with moral issues and confident in their professional moral roles. A critical approach, open-mindedness, emotion-guided behaviour, and moral courage are required for the development of moral sensitivity.

Moral courage is also one of the key characteristics of the nursing profession and is a significant tool for dealing with ethical issues. It is important in ensuring professional development, making correct decisions, and fulfilling one's duties. Moral courage, which involves carefully considering a situation and making a decision based on what one believes to be morally right, is one of the key factors in preventing moral distress in clinical settings. Nurses who have moral courage can advocate for their patients, improve patient safety, and enhance the quality of care and quality of life for their patients. It has been observed that nurses who have the moral courage to fulfil their duties are also committed to moral principles.

The ethical values, moral sensitivity, and moral courage of nurses are very important in decision-making in the clinical setting. People with a high level of moral sensitivity have more moral distress when confronted with ethical dilemmas. However, this makes them willing to show more moral courage to solve ethical problems and encourages them to take action. It is known that nurses with high moral sensitivity and courage overcome ethical problems easier, independently of factors such as working conditions, power dynamics, institutional culture, and health care area. Studies on this subject generally indicate that nurses have high levels of moral sensitivity and moral courage.

Intensive care units (ICUs) are one of the settings in which ethical issues arise most frequently. Ethical problems in the ICU are most commonly related to dishonesty, withdrawal of treatment, violations of privacy, disregard for autonomy, treatment and end-of-life decisions, inability to communicate effectively, informing families, and professional conflicts. During the COVID-19 pandemic, shortages of ICU beds, health care workers, and essential equipment and supplies contributed to additional ethical issues, such as deciding which patients will be prioritized, how limited resources will be used, triage uncertainty, and the isolation and safety of nurses, patients, and families. Under these conditions, health care professionals and managers have difficulty making ethical decisions.

For intensive care nurses to improve their ethical decision-making capacity, they must develop their moral sensitivity and moral courage. This gives rise to the need to assess nurses' moral sensitivity and courage in their professional practice, identify any deficiencies and errors, and address them with appropriate interventions.

3 | AIMS

This study aimed to evaluate levels of moral sensitivity and moral courage among ICU nurses serving as frontline workers during the COVID-19 pandemic.

4 | METHODS

4.1 | Design, setting and sample

This research was conducted as a descriptive cross-sectional survey. The results are reported in accordance with the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) guidelines.

The study was conducted in the ICUs of 11 different hospitals in Istanbul, Turkey between January and March 2021. The participating...
institutions were all designated by the Turkish Ministry of Health as pandemic hospitals at the time of the study and included nine government-funded hospitals (three public hospitals, five training and research hospitals, and one university hospital) and two private hospitals. The university hospital, training and research hospital and public hospitals where the study was conducted are financed and managed by the government. A private hospital is a hospital that is fully financed and managed by a foundation(s). The number of employees and patients, intensive care capacity and equipment of public hospitals are more limited than training and research hospitals, and university hospitals. The government-funded university hospitals have higher equipment and capacity than training and research hospitals. Private hospitals, on the other hand, are institutions that have more technical equipment and fewer patients, all health expenditures are covered by the person or persons receiving health services. Therefore, the conditions of the ICU, the coordination of the team and the hospitalization process may differ.

Participants were recruited using convenience sampling. There were 409 ICU nurses working in the ICUs of 11 different hospitals in Istanbul, Turkey between January and March 2021. The study sample included 362 ICU nurses who worked in the ICUs between the same dates, volunteered to participate in the study, and completely filled out the data collection forms. Support was obtained for the participation of nurses working in the intensive care unit in the study by contacting the nurse executives in the hospitals where the participants worked. QR-code posters containing the research invitation and directed to the online survey were hung on the notice boards of hospitals and intensive care units. Participants who agreed to participate in the study were recruited by scanning the QR code on this poster. To encourage the participation of ICU nurses in the study by ensuring that the posters on the notice boards were visible, a weekly reminder was made to the head nurses of ICUs. The contact information of the researchers was included in the research invitation poster. Participants were asked to reach the researchers through their contact information when they felt any concerns or problems. The participants communicated with the principal investigator on the issues they were worried about or wanted to ask about the study. Nurses who contacted the researchers raised concerns about the confidentiality of answers and other factors such as their own accommodation, transport, and limited resources. The nurses were directed to the most appropriate department to help them with their specific queries. Nurses completed an online consent form before answering the survey questions. There were no incentives or compensation offered for study participation.

4.2 | Instruments

The survey consisted of 3 parts and 65 questions. Research data were obtained using a personal information form, the Moral Sensitivity Questionnaire (MSQ), and the Nurses’ Moral Courage Scale (NMCS).21,22

4.2.1 | Personal information form

The researchers prepared this 14-question form based on the literature. The form included individual characteristics such as age, gender, marital status, and education level, as well as questions about the COVID-19 pandemic.13,21

4.2.2 | Moral sensitivity questionnaire

The MSQ was developed by Lützen et al. in 1997 to determine the ethical sensitivity shown by physicians and nurses in the ethical decision-making process.21 The Turkish validity and reliability study was performed by Tosun in 2018.23 The scale is a 7-point Likert-type measurement tool consisting of a total of 30 items and 6 subdimensions. These subdimensions and their score ranges are autonomy (7–49), providing benefit (4–28), holistic approach (5–35), conflict (3–21), application (4–28), and orientation (4–28). Total scores range from 30 to 210, with lower scores indicating higher ethical sensitivity. The Cronbach's alpha coefficient of the Turkish version of the scale was reported to be .84. In this study, the Cronbach's alpha was .93.

4.2.3 | Nurses’ Moral Courage Scale

The NMCS was developed by Numminen et al. in 2019 to measure the moral courage of nurses and was adapted to Turkish by Ayaz and Akkuş in 2020.7,22 The scale items were developed using the theoretical context related to moral courage in nursing. There are 21 items on this 5-point Likert-type scale. Total scores range from 21 to 105. A higher score indicates greater compliance with professional ethics and moral principles and a stronger attitude toward doing the right thing for the patient's benefit. The Cronbach's alpha coefficient of the scale was .95. In the present study, the Cronbach's alpha was .89.

4.3 | Data collection process

The survey was administered using Google forms. The survey was piloted on 10 participants to ensure the questions were clear and establish face validity. Survey results of 10 participants were not included in the analysis. The participants only had access to the study questions, and only the researchers had access to the results. Before the data were collected, participants were provided information about the study in the first part of the questionnaire and an explanation that the information obtained would be kept confidential. The “required” tab, which is the Google Form feature, was activated so that the participants can answer all the questions completely. “Submit another response link” tab of the Google Forms was not activated to prevent respondents from entering the survey multiple times. Informed consent was obtained from the participants and data were only obtained from participants who voluntarily agreed to participate in the study. The form took 10–15 min to complete.
4.4 | Ethical Considerations

Approval to conduct the study and collect data was obtained from the COVID-19 Scientific Research Platform under the Republic of Turkey Ministry of Health, General Directorate of Health Services. After receiving approval from the Ministry of Health, ethical approval was obtained from the University of Health Sciences Hamidiye Scientific Research Ethics Committee (Dated: 18 December 2020, No: 20/458). Permission was obtained from the researchers who conducted the validity and reliability study of the scales to use the Moral Sensitivity Questionnaire and Nurses’ Moral Courage Scale in the study. All study procedures complied with the provisions of the Declaration of Helsinki.

4.5 | Analysis

A licensed copy of the IBM SPSS Statistics version 22.0 (IBM Corp, Armonk, NY) was used to analyse the data gathered in the study. Only completely filled forms were included in the analysis. For descriptive statistics, the frequency, percentage, mean, standard deviation, minimum, and maximum were used. Kurtosis and skewness values were examined to determine whether the study variables showed normal distribution. Independent-samples t-test was used when comparing quantitative continuous data between two independent groups and one-way analysis of variance (ANOVA) was used when comparing between more than two independent groups. After performing ANOVA, the Scheffe test was used as a complementary post-hoc analysis to identify the differences. For continuous variables, Pearson’s correlation coefficient and regression analysis were performed. Statistical significance was defined as a p-value of <.05.

5 | RESULTS

This study was conducted with 362 intensive care nurses (response rate 89%). Of these, 63% worked in training and research hospitals, 17% in public hospitals, 10% in university hospitals, and 10% in private hospitals. The mean age of the nurses participating in the study was 21.60 ± 4.24 years and 82% were women. A majority (66%) of the nurses were single, 79% had an undergraduate degree, 79% did not have children, and most had between 1 and 10 years of nursing and intensive care experience (69% and 62%, respectively). During the pandemic, 45% of the nurses stated that they volunteered to work in the ICU, 65% had not considered resigning, and 69% had not experienced ethical issues (Table 1).

The mean NMCS total score was 90.70 ± 28.89 (range, 31–208), indicating a moderate level of moral sensitivity. Analysis of the NMCS subdimensions showed that the nurses’ mean autonomy score was 20.12 ± 8.17, the mean providing benefit score was 13.11 ± 4.47, the mean holistic approach score was 12.94 ± 5.89, the mean conflict score was 12.98 ± 3.71, the mean application score was 12.48 ± 4.59, and the mean moral courage score was 12.37 ± 4.72.

| TABLE 1 Distribution of the participants’ sociodemographic characteristics (n = 362) |
| --- |
| **Variables** | **n** | **%** |
| Age (years) (Mean ± SD) = 21.60 ± 4.24 |
| Sex | | |
| Male | 66 | 18 |
| Female | 296 | 82 |
| Marital status | | |
| Single | 238 | 66 |
| Married | 124 | 34 |
| Educational status | | |
| High school | 27 | 7 |
| Bachelor’s degree | 285 | 79 |
| Master’s degree or Doctorate | 50 | 14 |
| Have child/children | | |
| Yes | 76 | 21 |
| No | 286 | 79 |
| Working years in nursing | | |
| Less than a year | 50 | 14 |
| 1–10 years | 250 | 69 |
| More than 10 years | 62 | 17 |
| Working years in ICU | | |
| Less than a year | 105 | 29 |
| 1–10 years | 223 | 62 |
| More than 10 years | 34 | 9 |
| Type of institution | | |
| Public hospital | 63 | 17 |
| Private hospital | 35 | 10 |
| Training and research hospital | 227 | 63 |
| University hospital | 37 | 10 |
| Volunteer work during COVID-19 | | |
| Yes | 164 | 45 |
| No | 198 | 55 |
| Diagnosed with COVID-19 | | |
| Yes | 146 | 40 |
| No | 216 | 60 |
| Relatives diagnosed with COVID-19 | | |
| Yes | 246 | 68 |
| No | 116 | 32 |
| Relatives received COVID-19 treatment | | |
| Yes | 74 | 20 |
| No | 288 | 80 |
| Thinking about resigning | | |
| Yes | 126 | 35 |
| No | 236 | 65 |
| Experiencing ethical problems | | |
| Yes | 111 | 31 |
| No | 251 | 69 |
and the mean orientation score was 9.65 ± 5.62. The nurses’ average moral courage score was 82.08 ± 13.51, which was considered high (Table 2).

In correlation analysis, a weak negative relationship was found between the nurses’ moral sensitivity and moral courage scores ($r = -0.176$, $p = .001$). Moral courage scores were also weakly negatively correlated with scores in the moral sensitivity subdimensions of autonomy ($r = -0.192$, $p < .001$), providing the benefit ($r = -0.123$, $p = .019$), holistic approach ($r = -0.287$, $p < .001$), conflict ($r = -0.168$, $p = .001$), and orientation ($r = -0.249$, $p < .001$) (Table 3).

Comparison of the intensive care nurses’ moral sensitivity and moral courage scores based on their sociodemographic characteristics is shown in Table 4. Total moral sensitivity scores varied significantly with years of ICU experience ($p = .007$). Total moral courage scores increased significantly with higher education level ($p = .012$) and more years of nursing experience ($p = .016$) and were significantly higher in nurses who volunteered to work in the ICU compared with those who did not ($p < .001$).

6 | DISCUSSION

Nurses working in intensive care units often face various ethical issues related to decision-making, informed consent, restriction, or termination of life-supporting treatments, and equal distribution of resources. During the pandemic, the need for urgent triage and care exacerbated these problems.\textsuperscript{5,24} Intensive care nurses during COVID-19, have experienced ethical dilemmas in providing quality nursing care because of patient overcrowding, resource scarcity, extended working hours, and increased workload.\textsuperscript{1,25} These factors pose barriers to nurses’ fulfilling their role of defending and protecting patients’ rights, thereby leading to ethical problems.\textsuperscript{26} However, it is important for health care professionals to show moral sensitivity and moral courage in order to defend and protect patient rights. In light of this information, our study aimed to evaluate the moral sensitivity and moral courage of nurses working in ICUs between January and March 2021, during the COVID-19 pandemic. The response rate of our study was 89%. When the literature was examined, the response rates were found to be 78%, 44% and 42%, respectively, in studies examining the moral sensitivities of nurses during the COVID-19 pandemic.\textsuperscript{14,19,27} It is thought that the high response rate in our study is because of the posters on the notice boards and a weekly reminder from the head nurses to encourage the participation of ICU nurses in the study.

Although health care professionals often accept the increased risk of infection during the COVID-19 pandemic as a part of practising their chosen profession, they worry about familial transmission, especially to family members who are older, immunocompromised or have chronic diseases.\textsuperscript{28} In this study, we determined that 40% of the intensive care nurses had been diagnosed with COVID-19 during the pandemic and 68% had relatives who contracted COVID-19. Murat et al. reported that 13% of nurses had been diagnosed with COVID-19 and that 83% had a colleague (nurses, doctors, or technicians) who had COVID-19.\textsuperscript{29} Moreover, it has been reported that nurses with a positive COVID-19 history experienced burnout and fear of being infected and transmitting the disease to someone else, which increased their anxiety.\textsuperscript{14,30,31}

Although intensive care nurses feel a professional obligation to provide care to patients with COVID-19, their willingness to do so varies.\textsuperscript{27} In our study, we observed that nearly two-thirds of the nurses were not considering leaving the job, but more than half of them did not want to work in the ICU during the pandemic. Studies conducted before the COVID-19 pandemic indicated that the majority

| TABLE 2 | Distribution of moral sensitivity questionnaire and nurses’ moral courage scale scores ($n = 362$) |
|---|---|---|---|---|---|
| Scales | Mean | SD | Min | Max |
| Moral sensitivity questionnaire – Total | 90.70 | 28.89 | 31.00 | 208.00 |
| Moral sensitivity questionnaire – Subdimensions | | | | |
| Autonomy | 20.12 | 8.17 | 7.00 | 49.00 |
| Providing benefit | 13.11 | 4.47 | 4.00 | 28.00 |
| Holistic approach | 12.94 | 5.89 | 5.00 | 35.00 |
| Conflict | 12.98 | 3.71 | 3.00 | 21.00 |
| Application | 12.48 | 4.59 | 4.00 | 28.00 |
| Orientation | 9.65 | 5.62 | 4.00 | 28.00 |
| Nurses’ moral courage scale | 82.08 | 13.51 | 21.00 | 105.00 |

Abbreviation: r, Pearson’s correlation coefficient.

* $p < .05$, ** $p < .01$.

| TABLE 3 | The relationship between moral sensitivity and moral courage scores of participants ($n = 362$) |
|---|---|---|---|---|---|---|
| | Autonomy | Providing benefit | Holistic approach | Conflict | Application | Orientation | Moral sensitivity questionnaire total |
| Nurses’ moral courage scale total | $r = -0.192^{**}$ | $-0.123^{*}$ | $-0.287^{**}$ | $-0.168^{**}$ | $-0.071$ | $-0.249^{**}$ | $-0.176^{**}$ |
| $p$ | <.001 | .019 | <.001 | .001 | .178 | <.001 | .001 |
### TABLE 4  Comparison of the moral sensitivity and moral courage scores according to descriptive features (n = 362)

| Variable                          | Autonomy | Providing benefit | Holistic approach | Conflict | Application | Orientation | Moral sensitivity total | Moral courage total |
|-----------------------------------|----------|-------------------|-------------------|----------|-------------|-------------|------------------------|-------------------|
|                                   | Mean ± SD| Mean ± SD         | Mean ± SD         | Mean ± SD| Mean ± SD   | Mean ± SD   | Mean ± SD              | Mean ± SD         |
| Sex                               |          |                   |                   |          |             |             |                        |                   |
| Male                              | 18.15 ± 7.04 | 12.86 ± 4.72       | 12.59 ± 4.89       | 12.55 ± 4.27 | 11.85 ± 3.88 | 9.88 ± 4.70 | 86.45 ± 25.40           | 79.21 ± 13.94     |
| Female                            | 20.56 ± 8.35 | 13.17 ± 4.42       | 13.02 ± 6.10       | 13.08 ± 3.58 | 12.62 ± 4.73 | 9.60 ± 5.81 | 91.65 ± 29.57           | 82.71 ± 13.35     |
| t                                 | 2.180     | 0.495             | 0.531             | 1.054    | 1.238       | −0.367      | 1.323                  | −1.911            |
| p                                 | .030*     | .621              | .596              | .293     | .217        | .714        | .187                   | .057              |
| Education level                   |          |                   |                   |          |             |             |                        |                   |
| High school¹                      | 19.63 ± 6.90 | 13.33 ± 4.80       | 12.93 ± 5.75       | 12.56 ± 3.82 | 12.04 ± 4.35 | 9.70 ± 5.53 | 89.33 ± 28.99           | 75.26 ± 13.34     |
| Bachelor's degree²                | 20.40 ± 8.28 | 13.21 ± 4.48       | 13.20 ± 5.97       | 13.09 ± 3.61 | 12.72 ± 4.66 | 9.86 ± 5.64 | 91.90 ± 29.01           | 82.26 ± 13.55     |
| Masters or doctorate degree³      | 18.84 ± 8.19 | 12.44 ± 4.27       | 11.44 ± 5.34       | 12.58 ± 4.23 | 11.38 ± 4.20 | 8.44 ± 5.47 | 84.62 ± 27.93           | 84.72 ± 12.37     |
| F                                 | 0.824     | 0.660             | 1.916             | 0.594    | 1.945       | 1.356       | 1.387                  | 4.506             |
| p                                 | .439      | .517              | .149              | .533     | .144        | .259        | .251                   | .012*             |
| Years of nursing experience       |          |                   |                   |          |             |             |                        |                   |
| <1 year¹                          | 19.70 ± 7.45 | 13.94 ± 4.14       | 13.86 ± 5.16       | 12.92 ± 3.41 | 13.34 ± 3.53 | 10.24 ± 4.88 | 93.62 ± 24.65           | 77.62 ± 14.96     |
| 1–10 years²                       | 20.14 ± 7.89 | 13.03 ± 4.25       | 12.68 ± 5.55       | 13.03 ± 3.78 | 12.50 ± 4.51 | 9.37 ± 5.46 | 90.11 ± 27.39           | 82.26 ± 12.88     |
| >10 years³                        | 20.39 ± 9.83 | 12.77 ± 5.50       | 13.23 ± 7.57       | 12.84 ± 3.74 | 11.69 ± 5.54 | 10.29 ± 6.69 | 90.76 ± 37.17           | 84.90 ± 14.08     |
| F                                 | 0.100     | 1.078             | 0.918             | 0.072    | 1.797       | 0.985       | 0.307                  | 4.174             |
| p                                 | .905      | .341              | .400              | .931     | .167        | .374        | .736                   | .016*             |
| Years of ICU experience           |          |                   |                   |          |             |             |                        |                   |
| <1 year¹                          | 21.31 ± 8.43 | 13.88 ± 4.45       | 14.02 ± 6.40       | 13.27 ± 3.29 | 13.68 ± 4.18 | 10.46 ± 6.09 | 96.63 ± 29.26           | 80.40 ± 13.81     |
| 1–10 years²                       | 19.33 ± 7.37 | 12.68 ± 4.22       | 12.20 ± 5.00       | 12.86 ± 3.90 | 11.94 ± 4.40 | 8.96 ± 4.87 | 86.96 ± 25.71           | 82.28 ± 13.40     |
| >10 years³                        | 21.68 ± 11.39 | 13.56 ± 5.76       | 14.47 ± 8.51       | 12.88 ± 3.71 | 12.32 ± 6.23 | 11.68 ± 7.71 | 97.00 ± 41.71           | 85.91 ± 12.78     |
| F                                 | 2.815     | 2.761             | 4.780             | 0.438    | 5.233       | 5.096       | 5.000                  | 2.218             |
| p                                 | .061      | .065              | .09*              | .046     | .006*       | .007*       | .007*                  | .110              |
| Post-hoc                          |          |                   |                   |          |             |             |                        |                   |
| Volunteered to work in the ICU during the COVID-19 pandemic |          |                   |                   |          |             |             |                        |                   |
| Yes                               | 19.51 ± 8.10 | 13.16 ± 4.26       | 12.43 ± 5.85       | 13.32 ± 3.64 | 11.93 ± 4.42 | 9.16 ± 5.68 | 88.90 ± 28.42           | 84.88 ± 12.15     |
| No                                | 20.63 ± 8.22 | 13.07 ± 4.65       | 13.36 ± 5.91       | 12.70 ± 3.76 | 12.93 ± 4.70 | 10.06 ± 5.55 | 92.20 ± 29.27           | 79.75 ± 14.16     |
| t                                 | −1.298    | 0.186             | −1.509             | 1.573    | −2.075      | −1.515      | −1.084                 | 3.662             |
| p                                 | .195      | .853              | .132              | .117     | .039*       | .131        | .279                   | <.001*            |
| Variable                              | Autonomy Mean ± SD | Providing benefit Mean ± SD | Holistic approach Mean ± SD | Conflict Mean ± SD | Application Mean ± SD | Orientation Mean ± SD | Moral sensitivity total Mean ± SD | Moral courage total Mean ± SD |
|--------------------------------------|--------------------|-----------------------------|-----------------------------|--------------------|----------------------|----------------------|-------------------------------|-------------------------------|
| Diagnosed with COVID-19              |                    |                             |                             |                    |                      |                      |                               |                               |
| Yes                                  | 20.27 ± 8.25       | 13.23 ± 4.40               | 12.90 ± 5.93                | 12.98 ± 3.49       | 12.33 ± 4.44         | 9.57 ± 5.61          | 90.65 ± 29.12                | 82.06 ± 12.04                 |
| No                                   | 20.02 ± 8.14       | 13.03 ± 4.53               | 12.97 ± 5.88                | 12.98 ± 3.86       | 12.58 ± 4.70         | 9.70 ± 5.64          | 90.74 ± 28.81                | 82.08 ± 14.45                 |
| t                                    | 0.286              | -0.111                     | -0.005                      | -0.051             | -0.224               | -0.029               | .977                          | .988                          |
| p                                    | .775               | .687                        | .911                        | .996               | .606                 | .823                 | .977                          | .988                          |
| Relatives had COVID-19 treatment     |                    |                             |                             |                    |                      |                      |                               |                               |
| Yes                                  | 21.19 ± 8.99       | 13.59 ± 4.27               | 13.05 ± 6.30                | 12.93 ± 3.29       | 13.55 ± 4.90         | 10.15 ± 5.90         | 94.05 ± 30.95                | 82.22 ± 16.17                 |
| No                                   | 19.85 ± 7.94       | 12.99 ± 4.52               | 12.91 ± 5.79                | 12.99 ± 3.82       | 12.20 ± 4.48         | 9.52 ± 5.54          | 89.84 ± 28.33                | 82.04 ± 12.77                 |
| t                                    | 1.258              | 1.044                      | 0.188                       | -0.125             | 2.267                | 0.857                | 1.118                         | 0.101                         |
| p                                    | .209               | .297                       | .851                        | .900               | .024*                | .392                 | .264                          | .930                          |
| Thinking about resigning             |                    |                             |                             |                    |                      |                      |                               |                               |
| Yes                                  | 21.05 ± 8.82       | 13.25 ± 4.76               | 14.27 ± 6.52                | 12.59 ± 3.97       | 12.83 ± 4.90         | 10.21 ± 5.94         | 93.67 ± 31.88                | 81.11 ± 12.60                 |
| No                                   | 19.63 ± 7.78       | 13.04 ± 4.32               | 12.23 ± 5.41                | 13.19 ± 3.56       | 12.30 ± 4.42         | 9.35 ± 5.43          | 89.12 ± 27.11                | 82.59 ± 13.97                 |
| t                                    | 1.574              | 0.421                      | 3.180                       | -1.476             | 1.044                | 1.381                | 1.427                         | -0.991                        |
| p                                    | .116               | .674                       | .003*                       | .141               | .297                 | .168                 | .154                          | .322                          |
| Experiencing ethical problems        |                    |                             |                             |                    |                      |                      |                               |                               |
| Yes                                  | 21.41 ± 9.57       | 13.54 ± 4.82               | 14.33 ± 6.90                | 11.95 ± 4.04       | 12.79 ± 5.37         | 10.67 ± 6.73         | 94.73 ± 35.11                | 82.50 ± 12.27                 |
| No                                   | 19.55 ± 7.42       | 12.92 ± 4.31               | 12.32 ± 5.28                | 13.44 ± 3.47       | 12.34 ± 4.21         | 9.20 ± 4.99          | 88.92 ± 25.55                | 81.89 ± 14.04                 |
| t                                    | 2.006              | 1.217                      | 3.028                       | -3.585             | 0.860                | 2.306                | 1.768                         | 0.394                         |
| p                                    | .070               | .224                       | .007*                       | .001*              | .434                 | .041*                | .119                          | .694                          |

Abbreviations: t, t-test; F, One-way ANOVA test; Post-Hoc test, Scheffe test.
*p < .05.
of nurses do not work in their preferred unit, and this negatively affects their professional relationships, job satisfaction, and working environment.\textsuperscript{32,33} In contrast, nurses working in their preferred clinics express higher job satisfaction and lower stress levels.\textsuperscript{33,34} In another study conducted during the pandemic, Khodaveisi et al. reported that nurses did not want to continue working and were quitting because of the high transmission rate of COVID-19 and increased workload.\textsuperscript{14} With recent data indicating that an alarming number of nurses are leaving or intending to leave their current workplaces because of the growing threat of viral infection and poor working conditions, this will further complicate the existing shortage of qualified nurses.\textsuperscript{35}

More than half of the nurses in our study reported that they did not have ethical problems during the pandemic. This contradicts pre-pandemic studies conducted in Turkey indicating that the vast majority of nurses working in intensive care encounter ethical problems/dilemmas and that most of these problems could not be solved.\textsuperscript{36–38} It is important that nurses try to maintain a high level of moral sensitivity in the face of these ethical problems. The nurses in our study had a moderate level of moral sensitivity (90.70 ± 28.89). This is consistent with other studies of nurses working in general ICUs and surgical clinics.\textsuperscript{36,39–41} However, Khodaveisi et al. reported high moral sensitivity among nurses caring for COVID-19 patients.\textsuperscript{14} Other studies have also reported that nurses have a high level of moral sensitivity.\textsuperscript{12,13,42} In a study conducted in Iran, high moral sensitivity among nurses was found to increase nursing leadership and reduce moral distress.\textsuperscript{43} In another study examining the impact of COVID-19 on moral sensitivity, health workers who reported concerns about insufficient resources, long working hours, and asepsis/sterilization during the COVID-19 pandemic had low moral sensitivity scores in the holistic approach subdimension.\textsuperscript{19} These findings highlight the relevance of moral sensitivity in nursing practice and present a variety of ethical implications for the profession.

Nurses’ ability to perform the role of patient advocate requires them to show moral courage. Moral courage allows nurses to overcome various barriers, such as fear, and provide the best possible care to patients by approaching them with compassion.\textsuperscript{54–56} We determined that the nurses in this study had high moral courage (82.08 ± 13.51). Similarly, Khodaveisi et al. reported high moral courage scores in nurses caring for patients with COVID-19.\textsuperscript{14} Some studies also demonstrated that nurses had high moral courage scores,\textsuperscript{7,15,47,48} whereas others reported lower scores indicating a moderate level of moral courage.\textsuperscript{39,50} Unlike our findings, Murray reported that nurses’ moral courage was affected by unethical behaviour, ethical dilemmas, and conflicts and that these were associated with low levels of moral courage.\textsuperscript{51} Intensive care nurses who care for patients with COVID-19 must have a high level of moral courage and undertake the responsibility of saving their lives despite the stress, limited resources, and increased workload.

In this study, there was a very weak, negative correlation between intensive care nurses’ moral sensitivity and moral courage scores. As lower MSQ scores reflect greater moral sensitivity, our findings indicate a positive association between moral sensitivity and courage. However, the weakness of this relationship is not consistent with the literature. In a study of nurses involved in the care of patients with COVID-19, it was found that moral courage was strongly and directly correlated with moral sensitivity and safe nursing care.\textsuperscript{14} Similarly, Escolar-Chua, Mahdaviersesh et al., and Nunftawong et al. also reported positive associations between moral courage and directly related to moral sensitivity.\textsuperscript{25,47,52} These studies suggest that increasing nurses’ awareness of moral principles and their moral sensitivity promotes morally courageous behaviour. Various studies indicate that moral courage is based on ethical principles and that providing well-organized, quality care to patients encourages nurses’ moral courage.\textsuperscript{52,53} Murray also reported that moral courage is associated with ethical concepts and has a critical role in coping with ethical problems.\textsuperscript{51} These studies reveal that increasing nurses’ awareness of moral principles and moral sensitivity improves their moral courage behaviours.

In this study, nurses who had been working in intensive care for 1–10 years had the highest moral sensitivity, while moral courage increased with years of nursing experience. Moosavi et al. examined the moral courage of clinical nurses and determined that moral courage was associated with nurses’ work experience.\textsuperscript{48} Several studies have shown that ethical sensitivity in nurses increases with age and experience.\textsuperscript{26,36,41,54} When faced with ethical problems, nurses with more experience have a stronger moral sensibility and make the best decisions.\textsuperscript{55,56} Evaluation of the relationship between moral courage and sociodemographic characteristics showed that moral courage was higher among nurses with higher education levels, longer work experience, and willingness to work in the ICU. Studies exploring the effects of nurses’ moral courage in the clinic have also suggested that moral courage is positively associated with work experience.\textsuperscript{6,57} In addition, Khodaveisi et al. reported a negative relationship between working reluctantly and moral courage.\textsuperscript{14}

### 6.1 Implications and recommendations for practice

Identifying the moral sensitivity and courage of intensive care nurses may allow for the early detection and resolution of potential ethical issues, both during the pandemic and beyond. In addition, the development of moral sensitivity and courage can have positive results on nurses’ care behaviours. It will increase their job satisfaction, decrease physical and mental problems, reduce feelings of helplessness, hopelessness, disappointment, and burnout, and therefore improve the quality of nursing care. It may also contribute to the development of ethical guidelines to aid in pandemic management, as well as the development of moral sensitivity and moral courage for the solution of ethical problems faced by nurses. Many factors, both individual and institutional, can facilitate the development of moral sensitivity and courage. In this context, sharing our results with the participating institutions may help raise awareness of this issue among the administration and staff. Our results may also guide decision-makers in the planning and implementation of continuing education related to moral...
sensitivity and moral courage in nursing care. Further research is needed to identify associated factors and effective methods of promoting nurses’ moral sensitivity and courage.

7 | LIMITATIONS

This study has several limitations. Firstly, our sample is limited to nurses working in the COVID-19 ICUs of 11 hospitals in Istanbul, Turkey, each with different specialities, between January and March 2021. Secondly, our study is a cross-sectional study based on participants’ self-report. Thirdly, the findings of the study are limited to the responses of the participating nurses to the MSQ and NMCS and by collecting data online. The results cannot be generalized to the moral sensibilities and moral courage of all nurses caring for COVID-19 patients in Turkey. In addition, the study was carried out in a crisis period when the effects of the pandemic were experienced intensely. Our study results could not be compared because there was no data about the pre-pandemic period.

8 | CONCLUSION

The results of this study are valuable because they offer insight into the impact of moral sensitivity on the moral courage of intensive care nurses. Our results suggest nurses’ moral courage and moral sensitivity may affect each other positively. Nurses’ moral sensitivity related to holistic care in clinical settings needs further development. Increased moral sensitivity may enable nurses to show courage when faced with ethical issues, thereby reducing their moral distress. To develop and strengthen the moral courage and sensitivity of nurses, awareness of these concepts should be increased, and education should be improved by revising the content and teaching style of courses on ethical issues.

AUTHOR CONTRIBUTIONS

All authors listed meet the authorship criteria. Conception: Sonay Goktas, Cemile Aktug, Elif Gezginci. Design: Sonay Goktas, Cemile Aktug, Elif Gezginci. Supervision: Sonay Goktas, Elif Gezginci. Data Collection and/or Processing: Sonay Goktas, Elif Gezginci. Analysis and/or Interpretation: Elif Gezginci. Literature Review: Sonay Goktas, Elif Gezginci. Writing: Sonay Goktas, Cemile Aktug, Elif Gezginci. Critical Review: Sonay Goktas, Elif Gezginci. The manuscript has been read and approved by all the authors.

CONFLICTS OF INTEREST

Conflict of interest statement declared by the corresponding author on behalf of all authors: The authors whose names are listed certify that they have not conflicted of interest statement about personal or professional relationships, or any financial interests in this manuscript. The authors confirm their specific contributions to the work presented. The authors are in agreement on the conclusions, implications, or opinions stated in the manuscript reported. All authors give consent to the submission and publication of the work. Furthermore, each author certifies that this material or similar material has not been and will not be submitted to or published in any other publication.

ETHICS STATEMENT

The research authorization application was made to the COVID-19 Scientific Research Platform under the Republic of Turkey Ministry of Health, General Directorate of Health Services on 08.01.2021 and the necessary approval was obtained (Number: 2021-01-04T20_28_08). The research was found ethically appropriate by the Ethics Committee on December 18, 2020 with the decision number E-46418926-050.01.04.

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