

# Professional values and ethical sensitivities of nurses in COVID-19 pandemic

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## Abstract

**Background:** Nurses are facing several ethical problems like the safety of the nurses, patients, co-workers, and families, allocation of scarce resources, and the changing nature of the relationships of nurses with patients and families during the COVID-19 pandemic. These have caused nurses to have feelings such as stigmatization, fear, anger, anxiety, uncertainty, work-related strain, and burnout. Identifying nurses' ethical sensitivities and professional values are highly important to ensure that nurses are placed in the right decision-making position. This descriptive correlational study was carried out to evaluate the professional values and ethical sensitivities of nurses during the COVID-19 pandemic.

**Methods:** A quantitative descriptive and correlational study was performed with 245 nurses in Turkey. The "personal information form," the "nurses professional values scale-revised (NPVS-R)," and the "moral sensitivity questionnaire (MSQ)" were employed for data collection.

**Results:** The nurses' 52.7% reported facing an ethical dilemma. Also, 40.3% of the nurses who had an ethical dilemma during the pandemic failed to solve it. The mean NPVS-R scores of the nurses had statistically significant negative correlations with mean scores of the overall MSQ and its autonomy, benefit, integrative approach, and orientation subscales ( $p < .05$ ). The nursing staff had high levels of professional values and moral sensitivities.

**Conclusion:** Professional value perceptions were enhanced, and moral sensitivities were improved. Age and professional experience were identified as factors that affected the professional value perceptions and moral sensitivities of the nurses. The results will form the basis for future studies and contribute to the resolution of ethical dilemmas experienced by nurses.

## KEYWORDS

COVID-19, ethics, moral sensitivity, nurses, nursing values, professional values

## 1 | INTRODUCTION

COVID-19 has caused many countries to experience medical, social, professional, political, and economic problems. Additionally, the COVID-19 pandemic has caused important ethical, and moral problems in the field of health. The pandemic has caused many

changes in the health sector. These include the suspension of normal operations of some units that provide nonlife-threatening or deferrable services and their allocation to the treatment of patients affected by the pandemic. Most countries have allocated health workers, equipment and facilities, financial resources, medical products, and technologies for COVID-19, and other healthcare

facilities were transformed into pandemic treatment centers. Elective hospitalizations and surgical procedures have been postponed to focus health resources predominantly on the diagnosis and treatment of COVID-19. In nonemergency cases, family physicians were asked to be the primary care providers, and outpatient clinic admissions were managed through a single system to reduce crowding and the need for health workers.<sup>1-5</sup>

Nurses who are constantly working in clinics within the healthcare team experience an ethical dilemma between their ethical obligations and the inadequacies in health systems during the COVID-19 pandemic.<sup>1-3</sup> The inadequacies in health systems can be listed as difficulties in diagnosis, quarantine, and treatment, inadequacies in the follow-up and monitoring of suspected or confirmed cases, overloading with the pandemic with the existing problems in the health system (bed capacity, medical equipment, number of hospitals, nurses, and physicians) and bringing the system to a standstill, inability to follow up patients other than infection, disruption of the supply chain of medicines, and so forth, and the high risk of health workers due to their work without adequate equipment.<sup>2</sup> Nurses try to create a balance in terms of protecting themselves and their loved ones, managing this process to be consistent with their duties, and providing care for patients.<sup>4-7</sup> Moreover, certain risks come into being in terms of ensuring the safety and maintaining the general health and well-being of nurses who fought in clinical settings against the COVID-19 pandemic. During the pandemic, the change in nurse-to-patient ratios, providing a high-risk group with care, the risk of being infected with the disease, the lack of treatment and vaccines for the disease, changes in working systems, providing patients with care for busy, and long hours by using protective equipment and the likelihood of spreading the virus to other patients or own families. These have caused nurses to have feelings such as stigmatization, fear, anger, anxiety, uncertainty, work-related strain, and burnout. As nursing staff has been instructed to work under these new conditions which came into play in conjunction with the COVID-19 pandemic, this situation has become a source of ethical concern.<sup>8-11</sup> Ensuring the safety of nursing staff while they provide healthcare may pose professional and ethical problems in the context of their tasks of providing patients with care. These ethical problems experienced by nurses are the safety of the nurses, patients, their co-workers, and families, allocation of scarce resources, and the changing nature of the relationships of nurses with their patients and families, and these nurses have difficulty in solving these dilemmas.<sup>7</sup>

Professional values are abstract and generalized principles of behavior, that offer a basic standard for judging actions and goals and come into being by the virtue of the strong emotional attachment of the members of the profession, and they are verbally expressed in codes of ethics.<sup>10,11</sup> The professional values of nurses lead the way for them in implementing care activities, problem-solving, decision-making, and these values also guide them in their interactions with healthy/ill individuals, their co-workers, other team members, and society. The internalization of their professional values enables nursing staff to continue to provide safe, good quality, and ethical care by equipping them with the competence to settle conflicts and identify the top-priority activities.<sup>12,13</sup> Moreover, for nurses to recognize an ethical

problem and make the right decisions, ethical sensitivity, which is the ability to identify ethical problems, should be developed.<sup>14</sup>

During the COVID-19 pandemic, it is discerned that there is a strong need for nursing staff who are ethically sensitive and capable of providing ethically acceptable nursing care. Examining the decision-making process of nurses who are confronted with an ethical problem is of importance to the understanding of nursing practices that provide enhanced patient care and positive patient responses. It is considered that understanding how nurses select their behavioral styles when they are confronted with situations problematic in terms of ethics will contribute to the enhancement of the health of society. Thus, identifying nurses' ethical sensitivities and professional values is highly important to ensure that nurses are placed in the right decision-making position.<sup>10,15-17</sup>

According to the review of the relevant literature, there are a few studies that discuss the ethical problems encountered by nurses and healthcare workers during the COVID-19 pandemic.<sup>10,15</sup> These problems are emotional support, inequality, inability to psychological adjustment and stress resistance, and low sense of responsibility in nursing services encountered by nurses and healthcare workers during the COVID-19 pandemic.<sup>4,5</sup> Nevertheless, the study that compares the professional values and ethical sensitivities of nursing staff who provide COVID-19 patients with healthcare is limited. Therefore, this study was performed to identify nurses' professional values and ethical sensitivities during the COVID-19 pandemic.

Research questions:

- 1) What are the professional value perceptions of nurses during the COVID-19 pandemic?
- 2) What are the ethical sensitivities of nurses during the COVID-19 pandemic?
- 3) Is there any correlation between the ethical sensitivities and the professional values of nurses during the COVID-19 pandemic?

## 2 | METHODS

### 2.1 | Study design, setting, and sample

Designed as a descriptive and correlational study, this study was conducted in August–November 2020 with the participation of 245 nurses. The researchers sent an online survey link to the nurses who agreed to participate in the research and asked them to fill in the online survey form. First, upon sending the online survey link, the researchers reached 102 nurses. Then, the number of participants reached 200 after the link was shared with the relevant associations. After approximately 90 days, the research was concluded with 245 nurses. Nurses who volunteered to take part in the research and had internet access were included in the sample. The nurses were informed about the study, and with the first question, they were asked to agree to participate in the study. The questions were sent to the participant nurses' e-mail addresses in the form of the aforementioned survey form. After the participant nurses answered

the survey questions, they sent back the survey form to the researchers' e-mail addresses. The entire procedure took around 15 min for each participant.

Cochran's formula for an unknown population was used to calculate the sample size of the study. According to this, the minimum sample size was calculated at 186 people for  $p = .50$  and  $q = 0.50$ , with a 5% error ( $d = 0.05$ ) in a confidence interval of 95% ( $\alpha = .05$ ).

During recruitment for the study, 16 individuals refused to participate, and 21 individuals, who did not meet the inclusion criteria, were excluded. The study was completed with 245 individuals. The response rate for this study was 93.9%, with a rejection rate of 6.1%.

*Inclusion criteria:*

- \* Agreeing to participate in the study.
- \* Being aged 18 years or above.

*Exclusion criteria:*

\* Being transferred to another service unit during the period when the research was conducted.

\* Being on vacation during the period when the research was conducted.

- \* Not having an internet connection.

## 2.2 | Data collection and instruments

In the study, the "personal information form," the "nurses professional values scale-revised (NPVS-R)," and the "moral sensitivity questionnaire (MSQ)" were employed for gathering the research data. A survey form created on the Google forms platform, which was designed to facilitate data collection and prevent the same person from making multiple data entries, was used as the method of data collection. To get anonymous answers and ensure the confidentiality of the survey data, the e-mail address and electronic IP address registries were disabled.

### 2.2.1 | Personal information form

The form, which was prepared by the researchers based on the review of the relevant literature, comprised 11 questions that addressed the participant nurses' sociodemographic characteristics, the service units where they worked, and their ethical characteristics.

### 2.2.2 | Nurses professional values scale-revised

The revised nurses professional values scale is a 5-point Likert-type scale that Darlene Weis and Mary Jane Schank developed in 2009 for identifying whether nurses adopted the professional values representing the code of ethics of the American Nurses Association, and it is composed of 26 items in total. Each scale item is scored as the following: "5 points—extremely important," "4 points—very important," "3 points—important," "2—slightly important," and "1 point—not important." The

overall score is obtained by the addition of the item scores. The scores to be obtained from the scale range between 26 and 130 points. The higher the score obtained by a person from the scale, the stronger the person's professional value orientation is. The scale, which does not have any subscales, has factors that will contribute to the interpretation of the collected data.<sup>18</sup> The scale was adapted to Turkish society in 2014 by Acaroglu.<sup>19</sup> As in the case of the original scale, the revised scale has a construct with one dimension and multiple factors. The factors of the scale are Factor 1 "Caring" (item no: 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25), Factor 2 "Professionalism" (item no: 4, 5, 6, 7, 8, 9, 11, and 26), and Factor 3 "Trust" (item no: 1, 2, and 3). The Cronbach's  $\alpha$  coefficient was calculated as .92 in the study by Weis and Schank<sup>18</sup> and .96 in the study by Acaroglu.<sup>19</sup> The Cronbach's  $\alpha$  coefficient was calculated as .98 for this study, and hence, it was ascertained that the scale had a high level of reliability for the sample in this study.

### 2.2.3 | Moral sensitivity questionnaire

The MSQ, which was developed by Kim Lutzen has been used for identifying ethical sensitivities exhibited in ethical decision-making processes by physicians and nurses working first in the psychiatry clinic and then in other service units at the Karolinska Nursing Institute (Stockholm, Sweden). The questionnaire is a 7-point Likert-type measurement tool that has 30 items in total and six subscales (autonomy, benefit, integrative approach, conflict, application, and orientation). The minimum and maximum scores to be obtained from the questionnaire are, respectively, 30–210 points. Lower scores in the questionnaire indicate high-level ethical sensitivity, higher scores denote low-level ethical sensitivity. The validity and reliability test for adapting the questionnaire to the Turkish society was performed by Tosun,<sup>20</sup> and its Cronbach's  $\alpha$  coefficient was reported as .84. The Cronbach's  $\alpha$  coefficient was calculated as .89 for this study, and accordingly, it was discerned that the scale had a high level of reliability for the sample.

## 2.3 | Data analysis

The data were analyzed using the SPSS 26.0 software. Descriptive statistics are expressed as frequency, percentage, and mean value. Data analysis was conducted with correlation tests and  $t$ -tests.  $p < .05$  was accepted as statistically significant. All measurement results were evaluated by another researcher who had not partaken in the measurement process.

## 3 | RESULTS

The mean age of the participants was  $27.03 \pm 5.53$  years, their mean work experience was  $4.6 \pm 5.31$  years, and most participants were female (85.3%) and graduates of an associate or a bachelor's degree program (82.4%; Table 1).

**TABLE 1** Personal and ethical characteristics of the participants ( $n = 245$ )

	<i>n</i>	%
<i>Gender</i>		
Female	209	85.3
Male	36	14.7
<i>Education level</i>		
Associate or bachelor	202	82.4
Master	43	17.6
<i>Serving at a pandemic hospital</i>		
Yes	135	55.1
No	110	44.9
<i>Service unit</i>		
Pandemic service	14	5.7
Intensive care service	70	28.6
Emergency service	37	15.1
Inpatient service	75	30.6
Surgical service	7	2.9
Outpatient clinic	3	1.2
Other	39	15.9
<i>Having training about the pandemic</i>		
Yes	131	53.5
No	114	46.5
<i>Follow-up of suspected or confirmed COVID-19 patients</i>		
Yes	152	62.0
No	93	38.0
<i>Having training in ethics</i>		
Yes	200	81.6
No	45	18.4
<i>Place of ethics training (n = 200)</i>		
University	176	88.0
In-service training	24	12.0
<i>Having ethical dilemmas during the COVID-19 pandemic</i>		
Yes	129	52.7
No	116	47.3
<i>Solving the ethical dilemma experienced during the COVID-19 pandemic (n = 129)</i>		
Yes	77	59.7
No	52	40.3

Of all the participants, 135 nurses (55.1%) served at a pandemic hospital, and 152 nurses (62%) provided a COVID-19 patient with healthcare. More than half of the participants (52.7%) had experienced an

**TABLE 2** Nurses professional values scale-revised (NPVS-R) and moral sensitivity questionnaire (MSQ) scores of the participants ( $n = 245$ )

	Min (min <sup>a</sup> )	Max (max <sup>b</sup> )	Mean	Standard deviation
<i>NPVS-R</i>				
Caring	40 (15)	75 (75)	65.55	9.01
Professionalism	15 (8)	40 (40)	33.62	5.22
Trust	7 (3)	15 (15)	12.86	2.00
Total	69 (26)	130 (130)	111.99	15.20
<i>MSQ</i>				
Autonomy	7 (7)	47 (49)	20.10	6.62
Benefit	4 (4)	25 (28)	12.82	3.97
Integrative approach	5 (5)	34 (35)	12.74	5.19
Conflict	4 (3)	21 (21)	13.35	3.08
Application	4 (4)	27 (28)	13.42	4.47
Orientation	4 (4)	28 (28)	8.70	4.58
Total	49 (30)	198 (210)	92.89	22.49

<sup>a</sup>Minimum score to be obtained from the measurement tool.

<sup>b</sup>Maximum score to be obtained from the measurement tool.

ethical dilemma during the pandemic, and 40.3% of the participants who had an ethical dilemma during the pandemic failed to solve it (Table 2).

The mean NPVS-R score of the participants was  $111.99 \pm 15.20$ , while their mean scores in the NPVS-R caring, professionalism, and trust factors were successively  $65.55 \pm 9.01$ ,  $33.62 \pm 5.22$ , and  $12.86 \pm 2.00$  (Table 2).

The mean MSQ score of the participants was  $92.89 \pm 22.49$  points, while their mean scores in the MSQ autonomy, benefit, integrative approach, conflict, application, and orientation subscales were consecutively  $20.10 \pm 6.62$ ,  $12.82 \pm 3.97$ ,  $12.74 \pm 5.19$ ,  $13.35 \pm 3.08$ ,  $13.42 \pm 4.47$ , and  $8.70 \pm 4.58$  (Table 2).

There was no statistically significant difference in the mean NPVS-R scores of the participants based on their personal and ethical characteristics ( $p > .05$ ). Likewise, there was no statistically significant difference in their mean MSQ scores based on their personal and ethical characteristics ( $p > .05$ ) (Table 3).

The mean age of the participants had statistically significant negative correlations with their mean scores from the overall NPVS-R ( $p = .027$ ), its caring factor ( $p = .027$ ), and its trust factor ( $p = .002$ ). Besides, the mean age of the participants had statistically significant negative correlations with their mean scores obtained from the overall MSQ ( $p = .006$ ), its autonomy subscale ( $p = .005$ ), its integrative approach subscale ( $p = .044$ ), and its application subscale ( $p = .003$ ) (Table 4).

The mean professional experience (in years) of the participants had a statistically significant negative correlation with their mean scores obtained from the NPVS-R trust factor ( $p = .007$ ). Moreover, their mean professional experience had statistically significant

**TABLE 3** Mean nurses professional values scale-revised (NPVS-R) and moral sensitivity questionnaire (MSQ) scores of the participants based on their personal and ethical characteristics ( $n = 245$ )

	NPVS-R			MSQ		
	X ± SD	p	t-test value	X ± SD	p	t-test value
<i>Gender</i>						
Female	112.54 ± 15.22	.170	1.375	92.63 ± 22.54	.674	-0.422
Male	108.67 ± 14.89			94.37 ± 22.44		
<i>Education level</i>						
Associate and bachelor	111.59 ± 15.68	.372	-0.895	93.78 ± 23.72	.174	1.363
Master	113.92 ± 12.63			88.53 ± 14.56		
<i>Serving at a pandemic hospital</i>						
Yes	110.89 ± 14.43	.213	-1.250	92.59 ± 22.52	.822	-0.225
No	113.36 ± 16.07			93.25 ± 22.55		
<i>Having training about the pandemic</i>						
Yes	112.37 ± 14.23	.683	0.409	92.51 ± 22.38	.780	-0.280
No	111.57 ± 16.27			93.32 ± 22.69		
<i>Follow-up of the suspected or confirmed COVID-19 patients</i>						
Yes	111.93 ± 14.34	.932	-0.085	92.18 ± 21.29	.543	-0.609
No	112.09 ± 16.58			94.00 ± 24.34		
<i>Having trained in ethics</i>						
Yes	112.68 ± 14.98	.140	1.482	92.18 ± 19.62	.454	-0.755
No	108.93 ± 15.98			96.02 ± 32.43		
<i>Having ethical dilemmas during the COVID-19 pandemic</i>						
Yes	112.14 ± 15.05	.872	0.162	94.28 ± 2.05	.318	1.00
No	111.82 ± 15.44			91.37 ± 2.04		
<i>Solving the ethical dilemma experienced during the COVID-19 pandemic (n = 129)</i>						
Yes	113.24 ± 14.32	.050	1.977	92.12 ± 22.49	.192	-1.312
No	108.47 ± 15.08			97.00 ± 22.86		

Note: t-test (t) was used.

\* $p < .05$ .

negative correlations with their mean scores from the overall MSQ ( $p = .003$ ), its autonomy subscale ( $p = .014$ ), its benefit subscale ( $p = .009$ ), its integrative approach subscale ( $p = .047$ ), and its application subscale ( $p = .001$ ) (Table 4).

The mean NPVS-R scores of the participants had statistically significant negative correlations with their mean scores from the overall MSQ ( $p = .038$ ), its autonomy subscale ( $p = .037$ ), its benefit subscale ( $p = .030$ ), its integrative approach subscale ( $p = .008$ ), and its orientation subscale ( $p < .001$ ) (Table 5).

The mean NPVS-R caring factor scores of the participants had statistically significant negative correlations with their mean scores from the overall MSQ ( $p = .035$ ), its autonomy subscale ( $p = .036$ ), its

benefit subscale ( $p = .006$ ), its integrative approach subscale ( $p = .009$ ), and its orientation subscale ( $p < .001$ ) (Table 5).

The mean NPVS-R professionalism factor scores of the participants had statistically significant negative correlations with their mean scores from the MSQ integrative approach subscale ( $p = .017$ ) and the MSQ orientation subscale ( $p < .001$ ). The mean NPVS-R trust factor scores of the participants had statistically significant negative correlations with their mean scores from the MSQ integrative approach subscale ( $p = .029$ ) and the MSQ orientation subscale ( $p = .003$ ) (Table 5).

There was no statistically significant difference in the mean NPVS-R and MSQ scores of the participants based on their status of

**TABLE 4** Correlations of the participants' age and professional experience with their mean nurses professional values scale-revised (NPVS-R) and moral sensitivity questionnaire (MSQ) scores ( $n = 245$ )

	NPVS-R				MSQ							
	Total	Caring	Professionalism	Trust	Total	Autonomy	Benefit	Integrative approach	Conflict	Application	Orientation	
Age	<i>r</i>	-.143*	-.142*	-.093	-.202*	-.178*	-.183*	-.093	-.130*	-.084	-.193*	-.067
	<i>p</i>	.027	.027	.154	.002	.006	.005	.149	.044	.196	.003	.302
Professional experience	<i>r</i>	-.105	-.101	-.068	-.173*	-.192*	-.159*	-.169*	-.129*	-.076	-.223*	-.055
	<i>p</i>	.106	.121	.294	.007	.003	.014	.009	.047	.244	.001	.399

Note: Bold and values with \* indicate  $p < .05$ .

**TABLE 5** Correlations between the mean nurses professional values scale-revised (NPVS-R) and moral sensitivity questionnaire (MSQ) scores of the participants ( $n = 245$ )

		MSQ						
		Total	Autonomy	Benefit	Integrative approach	Conflict	Application	Orientation
NPVS-R								
Total	<i>r</i>	-.134*	-.135*	-.140*	-.173*	.066	.016	-.276*
	<i>p</i>	.038	.037	.030	.008	.311	.807	.000
Caring	<i>r</i>	-.136*	-.135*	-.177*	-.169*	.107	.018	-.295*
	<i>p</i>	.035	.036	.006	.009	.099	.776	.000
Professionalism	<i>r</i>	-.120	-.125	-.068	-.154*	.008	-.009	-.225*
	<i>p</i>	.065	.053	.297	.017	.905	.886	.000
Trust	<i>r</i>	-.077	-.058	-.096	-.141*	.023	.067	-.193*
	<i>p</i>	.236	.369	.137	.029	.727	.303	.003

Note: Correlation analysis (*r*) was used Bold and values with \* indicate  $p < .05$ .

following up with potential COVID-19 patients or patients with a confirmed diagnosis of COVID-19 ( $p > .05$ ) (Table 6).

## 4 | DISCUSSION

In this study, the participants had high levels of professional value perceptions, and to a considerable extent, they adopted principles, that would guide their professional behaviors, decisions, and communication styles. It was ascertained that the highest level of their perceptions pertained to the caring factor, which included behaviors emphasizing professional values such as altruism and justice. This factor was followed by the professionalism factor, which meant that the care process should be continued in light of the competence/integrity principle and the trust factor which reflected behaviors related to the justice principle. This finding of this study was analogous to the results of other studies which explored nurses' value perceptions in the period before the pandemic.<sup>12,21,22</sup> In these studies, it has also been demonstrated that nurses had high-level professional value perceptions. It was interpreted that the high mean NPVS-R score of the participants of this study was a

consequence of the fact that the participants achieved having a common view and attitude toward the management of the pandemic in particular by adopting professional values which guided their professional behaviors in clinical practice. It was discerned that the nurses continued to maintain their professional values even during the pandemic when they served under high levels of risk and stress.

As mentioned previously, as the score obtained from MSQ increases, the level of moral sensitivity falls. So that nurses can make the right decisions for identifying and solving ethical problems, they should have a high level of moral sensitivity, which is defined as the ability to recognize ethical problems.<sup>16</sup> The necessity of having high levels of ethical sensitivity in the profession of nursing stems from the importance of providing nursing care in a period when individuals struggle for life and the right of ill individuals to receive care in settings endowed with high-level ethical sensitivity besides the need of nurses to provide care in settings endowed with high-level ethical sensitivity.<sup>22</sup> In a previous study, it was asserted that nurses had psychological conflicts between their responsibilities for patient care and their right to protect themselves from a potentially deadly virus.<sup>23</sup> This study revealed that the participants had high-level

**TABLE 6** Mean nurses professional values scale-revised (NPVS-R) and moral sensitivity questionnaire (MSQ) scores of the participants who follow up suspected or confirmed COVID-19 patients and those who did not

	Follow-up of suspected or confirmed COVID-19 patients					
	Yes (n = 147)		No (n = 93)		p	t-test value
	Mean	Standard deviation	Mean	Standard deviation		
<b>NPVS-R</b>						
Caring	65.59	8.48	65.47	9.83	.921	0.099
Professionalism	33.53	4.92	33.75	5.68	.753	-0.316
Trust	12.80	1.94	12.95	2.10	.562	-0.581
Total	111.92	14.33	112.09	16.58	.932	-0.085
<b>MSQ</b>						
Autonomy	20.06	6.44	20.17	6.91	.900	-0.126
Benefit	12.62	3.85	13.11	4.15	.351	-0.935
Integrative approach	12.61	4.86	12.92	5.71	.658	-0.443
Conflict	13.39	2.96	13.28	3.27	.791	0.265
Application	13.37	4.39	13.51	4.62	.816	-0.233
Orientation	8.71	4.39	8.68	4.88	.952	0.061
Total	92.18	21.29	94.00	24.34	.543	-0.609

Note: t-test (t) was used.

\* $p < .05$ .

ethical-moral sensitivities even in the face of all these complicated ethical dilemmas. Although the participants had high ethical-moral sensitivities, reported that they could not solve these ethical dilemmas in this study results.

In this study, there was a statistically significant negative relationship between the participants' professional experience and their mean scores from the NPVS-R trust factor. Likewise, the participants' professional experience had statistically significant negative relationships with their mean scores from the overall MSQ and its autonomy, benefit, integrative approach, and application subscales. Thus, it may be asserted that nurses become ethically more sensitive along with an increase in their professional experience, levels. The results of this study were compatible with the results of studies that were carried out before the pandemic. The study by Monroe et al.<sup>15</sup> put forward that, as healthcare workers' professional experience increased, their inclinations to think critically and exhibit ethical behaviors were enhanced. On the other hand, Basak et al.<sup>22</sup> reported that, based on the duration of working in the profession of nursing, there was no statistically significant difference in their mean overall MSQ scores, but there was a statistically significant difference only in their mean MSQ autonomy subscale scores. It has been argued that the duration of clinical experience is a significant factor in gaining ethical sensitivity, and experienced nurses who have critical thinking ability are expected to make better clinical decisions.<sup>13,24,25</sup> Especially based on this result, it is thought that the experience gained by the nurses during the pandemic was a highly

significant factor that affected their process of making ethical decisions.

Another noteworthy finding of this study was that there was no statistically significant difference in the mean MSQ and NPVS-R scores of the participants based on their characteristics and ethical characteristics such as having training about ethics. Based on this finding, it was considered possible that the content of the ethics training, that the participants claimed to have was likely composed of theoretical topics that offered general knowledge and did not sufficiently address practices related to ethical problems and their solutions. In fact, education programs to be offered on the topic of ethics for equipping nurses with professional value perceptions and ethical-moral sensitivities should be organized in a manner to include the topics of clinical ethics and practice, in addition to theoretical knowledge.<sup>14</sup>

While nurses' professional values direct them in implementing care activities, making decisions, and solving ethical problems, these values also guide them in their interactions with healthy/ill individuals, co-workers, other team members, and society. The internalization of professional values enables nurses to continue to provide safe, good-quality, and ethical care by endowing them with the competence to settle conflicts and identify the top-priority activities.<sup>12,13</sup> Another finding of this study that was compatible with the aforementioned view was that, as the nurses' professional value perceptions were enhanced, their ethical-moral sensitivities were also improved.



## 4.1 | Limitations

This study had certain limitations. Participation in the study was on a voluntary basis, and the participants to be included in the sample were not randomly selected. Besides, the study focused on a specific population of nurses who worked in the health system especially in hospitals during the COVID-19 pandemic. Moreover, the data obtained from only the survey forms which were filled in fully were analyzed, and the survey forms in which all questions were not answered were left out of the analyses in the study.

## 5 | CONCLUSION

The participants had high levels of professional values and moral sensitivities. There was no statistically significant difference in the participants' professional values and moral sensitivities based on their personal and ethical characteristics. Moreover, as the participants' professional value perceptions were enhanced, their moral sensitivities were also improved. Furthermore, age and professional experience were identified as factors that affected the professional value perceptions and moral sensitivities of the participants.

The pandemic has been accompanied by several problems that have affected humanity. These problems have affected both the functioning and the work conditions of the members of the profession of nursing. Nurses who guide the way for the health system with their knowledge and skills have high professional values and ethical-moral sensitivities even during the period of the pandemic. However, nurses have confronted several questions and ethical dilemmas alongside the pandemic. So that nurses can make the most accurate decisions about ethical problems, guidelines of ethics should be created for the COVID-19 pandemic on the international level. Accordingly, by adding more functions to ethics committees, which have already been present in hospitals and have checked the conformity of clinical trials with principles of ethics and relevant laws, it will be useful to restructure such ethics committees in a way to allow them to provide nurses and the entire healthcare team with consultancy services in the context of ethical dilemmas encountered by them during treatment and care processes. In this study, the professional values and ethical sensitivities of nurses during the pandemic and the factors affecting these variables were determined. The results of this study will form the basis for future studies and contribute to the resolution of ethical dilemmas experienced by nurses. It is also recommended that more detailed and qualitative research designs be created for these problems in the future.

### AUTHOR CONTRIBUTIONS

The paper was conceived by Dilek Yildirim and Vildan Kocatepe. Dilek Yildirim drafted the first manuscript. Dilek Yildirim and Vildan Kocatepe made substantial contributions to the content, arguments, and organization of the paper, and revised it critically. All authors have read and approved the final manuscript.

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### CONFLICT OF INTEREST

The authors declare no conflict of interest.

### DATA AVAILABILITY STATEMENT

Data are available upon request from the corresponding author.

### ETHICS STATEMENT

To perform the study, ethical approval was received from the COVID-19 Scientific Research Evaluation Commission of the Ministry of Health of Turkey and the Ethics Committee of Istanbul Sabahattin Zaim University (18/08/2020-E.4146). Moreover, after getting information about the research, all participants of the study consented to partake in the study through the online survey. The study was carried out in conformity with the principles of the Declaration of Helsinki.

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