Original Article

Moral distress and moral courage among Iraqi nurses during the COVID-19 pandemic: a cross-sectional study

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Abstract

In the years following its outbreak in 2019, COVID-19 changed the health-care system structures, the context of professional activity, and nurses' moral performance. The present study aimed to examine the moral distress and moral courage of Iraqi nurses during the COVID-19 pandemic. This cross-sectional and correlational study was conducted in 2021 on 168 nurses selected by convenience sampling methods. Data were collected by self-reported instruments including a demographic questionnaire, the Professional Moral Courage (PMC), and the Moral Distress Scale (MDS). Data were analysed using descriptive statistics, the Spearman, Mann-Whitney and Kruskal-Wallis tests, and SPSS version 22. Most nurses showed a moderate level of moral distress (98.80%) and a high level of moral courage (99.40%).

The dimension of multiple values had the highest mean (12.45 ± 1.47) and endurance of threats had the lowest mean (9.15 ± 1.79). There was a statistically significant correlation between moral distress and moral courage (P = 0.007, r = - 0.2), and moral distress and the dimensions of endurance of threat (P < 0.001, r = - 0.26), going beyond compliance (P < 0.001, r = - 0.037), and moral goals (P < 0.001, r = - 0.173). A statistically significant relationship was also found between moral distress and work shift, position and gender (P < 0.05), and between moral courage and position (P < 0.05). We concluded that nurses need more organizational support in terms of protective facilities, job security and organizational incentives to be able to show ethical behaviors.

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***Received:** 19 Jul 2023*
***Accepted:** 16 Oct 2023*
***Published:**30 Dec 2023*

Citation to this article:
Hthelee LHH, Sadooghiasl A, Mohammadkhan Kermanshahi S. Moral distress and moral courage among Iraqi nurses during the COVID-19 pandemic: a cross-sectional study. J Med Ethics Hist Med. 2023; 16: 19.

***Keywords:** Ethics; Morals; Distress; Courage; Nurses; COVID-19; SARS-CoV-2.*

Introduction

The onset of the COVID-19 pandemic has clearly challenged health-care systems around the world. The unknown nature of the disease, uncertainty about treatment methods, the large number of patients, and the sped-up pace of deaths have caused an increasing burden on all health-care providers (1-4).

In the meantime, nurses have had the most exposure to COVID-19 patients. They have been providing safe, quality care while protecting themselves from the illness(5). The feeling of unfamiliarity and powerlessness, loss of control, caring for the same patients and having to deal with restrictions have caused nurses to face challenges in implementation of ethical requirements and as a result experience moral distress (6). Moral distress is a painful and unstable psychological feeling that occurs when a nurse is fully aware of a moral act, but unable to perform it (7, 8).

Besides the factors listed above, COVID-19 has changed nurses' perceptions of plans, epidemic management skills, communication and teamwork, physical, emotional and financial resources in caring for COVID-19 patients and their families, and the ability to care for each other, which has caused nurses to face new challenges every day (9). Inadequate personal prevention equipment, lack of special facilities to care for patients in critical situations, changes in caring regulations and standards, a lack of organizational support, national policies on social distancing, and recruitment of volunteers are among the outcomes of the COVID-19 pandemic that exacerbate moral distress (9-11). Various individual, organizational and extra-organizational factors can aggravate moral distress (9). Unequal distribution of resources, excessive workload, disregard for nurses' opinions in decision-making, and organizational and hospital policies can all be effective in creating moral distress (12). Limitations in equipment and human and financial resources lead nurses to think that they are unable to care for their patients, as a result, these issues can threaten moral principles.(13, 14). The study by Henrich et al. showed that moral distress at the individual level causes negative emotional reactions in nurses such as fatigue, embarrassment about not providing good care, inappropriate level of care, worthlessness and discouragement (15). Termination of employment in the organization and leaving work are other consequences of moral distress that inflict irreparable damage on the organization and the health service delivery system (8, 16).

Several studies have investigated nurses' moral distress during the COVID-19 crisis and their findings show that nurses have been experiencing high levels of moral distress (2, 8, 10, 16, 17).

Having moral courage is one of the most effective ways to avoid moral distress. When a nurse recognizes the issue and makes an ethical decision, she/he will take ethical action without considering the obstacles, and will therefore experience little tension (18). Moral courage is the ability to overcome superiority and act on one's moral beliefs, and serves as a bridge between recognizing one's personal values and job commitments and acting on them despite the dangers (19).

Therefore, it is important to assess moral distress as an unwanted phenomenon and moral courage as an important characteristic for professional nurses (20). Studies have shown that nurses who have a high level of moral courage experience less moral distress, but the correlation between moral courage and moral distress depends on the research context and varies in intensity. The reason for these differences is that by changing the conditions prevailing in the research environment, the studied variables show different behaviors (20-25).

Few studies have investigated the status of moral distress and moral courage among Iraqi nurses. In one study, Abed stated that poor organizational structure and uneven distribution of facilities in different wards of Iraqi hospitals had led to increased workload and consequent moral unrest (26). Abdulah et al. explored nurses' experiences of giving care to patients during the pandemic. According to their study, nurses had fear, stress and anxiety about being infected while working at COVID-19 hospitals (27).

We need to have a full understanding of nurses' moral distress and moral courage during the COVID-19 pandemic to be able to support nurses more. We also need basic information for future studies. Therefore, this study aimed to determine moral distress and moral courage among Iraqi nurses during the COVID-19.

Methods

Ward, a Clinic and a Nurse Management Office. We collected data from all departments. To calculate the sample size, we used the Morgan table, adding 20% for attrition, and selected 168 nurses using the convenience sampling method. In total, 168 completed questionnaires were analyzed. The inclusion criteria for participants were: having a nursing degree (diploma, associate's degree, bachelor's degree or higher), employment in Al-Aziziyah Hospital as a nurse, fluency in Arabic and understanding Arabic questions, having a mobile

phone, and having the ability to complete an online questionnaire. The exclusion criterion was failure to complete the questionnaire. In this study, all questionnaires were completed and delivered to the researcher electronically?

Data Collection Tools

We used three self-report questionnaires for data collection:

The Demographic Characteristics Form:

This form assessed demographic characteristics including gender, age, marital status, level of education, position, work experience, working ward, work shift, working hours per month, and having participated in a nursing ethics training workshop.

*The Professional Moral Courage Scale (PMC)*The PMC was designed by Sekerka et al. in 2009. It has 15 items and measures five subscales including moral agency, multiple values, endurance of threats, going beyond compliance, and moral goals. Every subscale has three items (28).

Abdeen and Atia translated this scale into Arabic and then asked 5 professors who were experts in nurse management to assess the content validity of the items; any necessary adjustments were made accordingly. The Cronbach's alpha coefficient was 0.85, which shows that the scale has acceptable internal consistency. The items are scored on a 5-point Likert scale from 1 (never) to 5 (always), and scores range between 15 and 75. Scores 0 - 39 indicate low and scores more than 39 indicate high levels of moral courage. We used the same scoring system in our study to determine the level of moral courage in our subjects (29). We also assessed the internal consistency of the scale, which was acceptable with a Cronbach's alpha coefficient of 0.71.

The Moral Distress Scale (MDS)

The Moral Distress Scale was designed by Corley to measure the level of moral distress among nurses. Hassan et al. translated the Moral Distress Scale into Arabic and evaluated its content validity and internal consistency among nurses in intensive care units of different hospitals in Saudi Arabia, and found the Cronbach’s alpha coefficient to be 0.98. The MDS has 30 items that are scored on a 5-point Likert scale from 0 (never) to 5 (very high). Scores range between zero and 190, indicating three levels of moral distress: mild (1 to 64), moderate (64 to 127), and severe (128 to 190). We used the same scoring method to evaluate the level of moral distress in our subjects. We assessed the internal consistency of the scale, and found the Cronbach's alpha coefficient to be 0.81 (30).

Although the official language of Iraq, Saudi Arabia and Egypt is Arabic, we evaluated the face

validity of the PMC and MDS using qualitative face validity. For this purpose, we asked 10 Iraqi nurses to check both scales for understandability and comprehensiveness of the items. The nurses found both scales to be acceptable and understandable. We also assessed the qualitative content validity by using expert opinions. We asked 10 faculty members to check the two scales in terms of clarity, relatedness and grammatical correctness, and both scales were approved.

Data Collection and Analysis

In order to follow the prevention protocols for COVID-19, we prepared all questionnaires electronically using Google Forms. We provided full explanations related to the objective of the research, instructions for completing the items, and ethical considerations at the beginning of the questionnaire. We also added an informed consent section at the beginning of the questionnaire. In order to facilitate nurses' participation in the study, we designed the questionnaire link using the QR code software and gave this QR code to the nurses in print. Nurses scanned the code using a smartphone and received the questionnaire. In this way, the participant's cell number was not known to the researcher and confidentiality was fully observed. We also provided full instructions on how to complete the questionnaire in person and orally. Data collection was performed from December 2021 to the end of January 2022.

In order to analyze and manage data, we used SPSS version 22. Quantitative variables were described by using mean and standard deviation, and frequency and percentage. We also used the Kolmogorov-Smirnov test to determine the normality of data distribution. Since data had non-normal distribution, non-parametric tests including Mann-Whitney and Kruskal-Wallis were used to examine the relationship between variables ($P < 0.05$ was considered significant).

Results

A total of 168 questionnaires (response rate 97%) were completed and analyzed. Most of the participants were female (72.62%), married (57.14%), had an associate's degree in nursing (44.05%), were working in the emergency ward (29.8%), had a nurse position (82.10%), were working the morning shift (56.50%), and had a history of participating in nursing ethics training workshops (62.50%). The average age of the participants was 26.32 years and most of them were in the age group younger than 25 years old (61.30%). They had an average of 4.58 years of work experience and most had less than 5 years of work experience (73.80%). The majority of the in

the age group younger than 25 years old (61.30%). They had an average of 4.58 years of work experience and most had less than 5 years of work experience (73.80%). The majority of the participants worked 144 hours per month (32.10%) and their average working hours were 150.09 hours per month. The participants' demographic profile is presented in Table 1.

Table 1. *Participants' demographic profile.*

Variable (n =168)		Frequency (Percentage %)
Gender	Female	122 (72.62)
	Male	46 (27.38)
Age (years) Mean ± SD (26.32 ± 5.83) 19 - 44 years	< 25	103 (61.30)
	25 - 35	49 (29.20)
	> 35	16 (9.50)
Marital Status	Single	72 (42.86)
	Married	96 (57.14)
Education	Nursing diploma	61 (36.31)
	Associate's degree	74 (44.05)
	Bachelor's degree and higher	33 (19.64)
Work Experience (years) Mean ± SD (4.58 ± 5.57) 8 months - 35 years	< 5	124 (73.80)
	5 - 10	21 (12.50)
	> 10	23 (13.70)
Working Ward	CCU	13 (7.70)
	Emergency	50 (29.80)
	Medical & surgical	38 (22.70)
	Operation room	16 (9.50)
	Neonatal and pediatric	29 (17.20)
	Other (clinic, nurse management office, infection)	22 (13.10)
Position	Nurse	138 (82.10)
	Head nurse/nurse manager	30 (17.90)
Work Shift	Morning	95 (56.50)
	Evening and night	73 (43.50)
Working Hours per Month (hours) Mean ± SD (150.09 ± 18.88)	132	47 (28.00)
	144	54 (32.10)
	154	42 (25.00)
	181	3 (1.80)
	192	22 (13.10)
Attending Ethics Training Workshops	Yes	105 (62.50)
	No	63 (37.50)

Most of the participants had a moderate level of moral distress (98.80%) and a high level of moral courage (99.40%). The Kolmogorov-Smirnov test showed that the variables of moral courage and moral distress did not have normal distribution ($P < 0.05$). Spearman's correlation coefficient showed a statistically significant and indirect linear relationship between moral distress and moral courage ($P < 0.05$). Table 2 shows the correlation between moral courage and moral distress.

Table 2. *The correlation between moral courage and moral distress.*

Variable			Moral Distress		
			1 - 64 Mild	65 - 127 Moderate	128 - 190 Severe
			2 (1.20%)	166 (98.80 %)	0 (0.0%)
Moral Courage	Low ≤ 39	1 (0.60%)		*P* = 0.007 R = - 0.2	
	High > 39	167 (99.40%)			

We assessed the various dimensions of moral courage and found that multiple values had the highest mean (12.45 ± 1.47) and endurance of threats had the lowest mean (9.15 ± 1.79). Spearman's correlation coefficient showed a statistically significant and indirect linear relationship between moral distress and the dimensions of endurance of threat, going beyond compliance, and moral goals (P < 0.05). Table 3 shows the correlation between moral distress and the dimensions of moral courage.

Table 3. *The correlation between moral distress and the dimensions of moral courage.*

Variable		Mean ±SD	Moral Distress	
Moral Courage	Moral Agency	12.38 ± 1.67	*P* = 0.261	R = - 0.087
	Multiple Values	12.45 ± 1.47	*P* = 0.644	R= - 0.036
	Endurance of Threats	9.15 ± 1.79	*P* < 0.001	R = - 0.26
	Going beyond Compliance	12.36 ± 1.67	*P* < 0.001	R = - 0.037
	Moral Goals	10.48 ± 1.50	*P* < 0.001	R = - 0.173
	Total	56.83± 5.01	*P* = 0.007	R = - 0.2

The results of the Mann-Whitney test showed a statistically significant relationship between the variable of position and the moral courage of the participants. Also, there was a statistically significant relationship between work shift, position and gender, and moral distress (P < 0.05). The findings of the Kruskal-Wallis test showed no statistically significant relationship between education and working ward variables, and moral courage and moral distress (P < 0.05).

Discussion

Our findings showed that most of the nurses had a moderate level of moral distress, which was inconsistent with the findings of previous studies (31, 32). The reason for this inconsistency may be that the present study was conducted during the

COVID-19 pandemic and the nurses would have experienced added distress in response to the challenges created by the crisis (33). Some factors that may have increased the level of moral distress in nurses during the COVID-19 pandemic include: nurses' perceptions of their caring roles, the type and level of skills needed to manage patients, communication with colleagues at different organizational levels, teamwork, and the management of psychological responses in self-care and family care. Other factors affecting nurses' moral distress are: shortage of protective facilities and the rules and regulations governing the working conditions during the pandemic (9), lack of knowledge and uncertainty about how to treat COVID-19 patients, a wide range of diseases, fear of infection, preventive policies, limited availability of resources, changes in caring roles (31), and lack of effective nurse leaders with adequate training to lead and manage nurses and decision-making (34). Our findings were different from those of Miljeteig et al. because of the levels of organizational support and access to resources and transparent guidelines on preventive measures in Norway (35).

Our findings showed that most participants had a high level of moral courage, which was inconsistent with the findings of some previous research (36-40). Although other studies have been conducted in different countries with different cultural backgrounds and working conditions, the results are consistent with the findings of the present study. Moral courage is an essential virtue in the nursing profession and people in this profession need it to perform their duties. Courage has also been introduced as one of the six characteristics of care and because care is at the heart of the nursing profession and an integral part of it, moral courage is an important requirement of the nursing profession (37). Contrary to the findings of the present study, the level of moral courage of nurses was reported weak and moderate by Gallagher et al. and Hannah et al., respectively (41, 42). This difference can be due to the timing of each study and the specific conditions of the research environment in terms of organizational structures and the cultures and values of the study community.

Our findings also showed that the dimension of multiple values had the highest mean, which is consistent with the results of a study by Moosavi et al. (43), but inconsistent with some other studies (44, 45). The high level of multiple values shows the extent to which nurses can combine personal values with their professional and organizational values (45, 46).

In the present study, the endurance of threats dimension had the lowest mean, which is consistent with the findings of previous studies (47, 48). This dimension indicates an individual's performance in the face of threats and fears. A low score in this dimension may indicate a lack of support from the organization and is therefore particularly important for the managers. Strengthening this dimension requires the support of managers, improved job security, and organizational incentives for ethical behaviors (21, 48).

Our findings showed a significant and indirect relationship between moral courage and moral distress. This means that the higher the level of nurses' moral courage is, the less moral distress they will experience. In this regard, a study by Aminizadeh et al. aimed at determining the relationship between moral courage and moral distress among nurses in intensive care units showed a significant and inverse relationship between the two (21). Safarpour et al. examined the relationship between moral distress and moral courage among Iranian nurses and identified a significant and indirect linear relationship between them; they also found that the severity of moral distress had a significant relationship with gender, but that none of the demographic variables were related to the frequency of moral distress and moral courage (22). In the present study, there was no statistically significant relationship between working ward, and moral courage and moral distress. This was different from the findings of Moaddaby et al. (49), and Shamsalinia (50), but it was in line with the findings of a study by Donkers et al. in the Netherlands. Donkers et al. showed that the level of moral distress among nurses working in intensive care units was not higher than nurses working in other departments (32).

According to the findings of Moaddaby et al., there was a significant correlation between nurses' perception of futile care and their moral distress in the intensive care unit, as nurses with high levels of moral distress were more likely to perceive the care they were providing as futile (49).

The findings of a study conducted by Shamsalinia showed that there was a significant relationship between nurses' moral distress and work-related factors including work experience, employment status and type of department (50).

Ramos et al. found that several factors have been introduced as the main causes of moral distress in nurses; these include: creating ethical concerns related to the organization, working conditions, professional skills and professional valuation (48).

The present study also revealed a significant relationship between moral courage and the

position of the participants, that is, nurse managers showed a higher level of moral courage. The results of the present study were consistent with the findings of Ebadi et al. (37), Numminen et al. (39), and Mousavi and Izadi (51). It is essential for nurse managers to have moral virtues such as courage (52), and organizational status and having legal power in the organization are among the prerequisites of moral courage (18). This finding shows that because nurse managers have organizational power and authority, they have more power to decide and take part in decision-making at different organizational levels compared to nurses, so nurse managers experience less moral distress. Also, nurse managers do not provide direct clinical care to patients, so they are less exposed to critical and specific conditions of patients (21).

The limitations of the present study include the sampling method, the data collection method, and the effect of the study variables on nurses' responses. Since this study was done during the COVID-19 crisis, the generalizability of the findings may have some limitations.

Conclusion

This study showed that most of the participants had a moderate level of moral distress and a high level of moral courage. According to the findings, more attention should be paid to moral distress in nurses. Interventions that can reduce nurses' moral distress include participating in-patient care, supporting each other, managers' encouragement and support of teamwork, clarifying nurses' job description, and providing training programs for nurses. Based on the findings, we recommend to use different educational methods that focus on respect-based goal-setting strategies, honesty and attention to others, help and benefit, and moral principles and values.

Ethics Approval and Consent to Participate

This study was approved by the Research Ethics Committee of Tarbiat Modares University (IR.MODARES.REC.1400.237). We also obtained an approval letter from the Iraqi Ministry of Health and the Al-Aziziyah Hospital for entering the research environment and performing this study. We gave all nurses information about the aim of the study and details on their participation. We also provided all the necessary information at the beginning of the online questionnaire. Oral and written informed consent were obtained from the participants, and principles of anonymity and confidentiality were observed. Questionnaires had a QR Code that could be scanned by the nurses to ensure their confidentiality. All stages of the research were carried out in accordance with the

declaration of Helsinki, and all participants provided informed consent.

Acknowledgements

The authors express their gratitude to the study participants and Tarbiat Modares University for their contributions to this research.

Conflict of Interests

The authors declare no potential conflict of interests with respect to the research, authorship, and/or publication of this article.

Authors' Contribution

All authors contributed to the study design and conceptualization, data analysis and interpretation, and manuscript writing. L.H. contributed to the data collection. A.S. and S.K. contributed to the study supervision.

Funding Statement

Not applicable.

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