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Original Article

Moral Distress Challenges in Nurses During Early Stage of COVID-19 Pandemic: A Qualitative Study

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Abstract

Introduction: As a serious crisis, the COVID-19 pandemic put a lot of pressure on nurses, and many ethical challenges arose for them. The aim of the study was to explore the moral distress challenges in nurses during the COVID-19 pandemic.

Methods: A qualitative study with a conventional content analysis approach was adopted. A purposive sampling method with maximum variation was used and 13 nurses caring for patients with COVID-19 participated in this study. Data were collected using individual semi-structured interviews until data saturation and concurrently analyzed by MAXQDA software.

Results: Three main categories including 'trial and error in care of patients with COVID-19, 'negligence in performing professional duties' and 'inappropriate organizational structure' emerged as the moral distress challenges experienced by the Iranian nurses during COVID-19 pandemic.

Conclusion: Providing a codified treatment plan at the first opportunity is effective to prevent trial and error in the treatment and care of patients. Providing the latest information about the disease or the crisis that has happened manages the stress and work pressure to some extent. The existence of instructions for allocating resources and equipment can help in crisis management. Long-term planning for providing sufficient human resources is an issue that should be the priority of the officials. It should be noted that nurses are trained for normal as well as crisis situations, perhaps their insufficient training also has an effect on aggravating challenges in crisis situations.

Introduction

During the COVID-19 pandemic, healthcare providers faced with a heavy workload due to the increase in positive cases and deaths as well as frequent hospital admissions and high workload.[1]

In such a situation, the medical staff are required to defend the patient's rights and prevent material and spiritual damages to the patients.[2] Nevertheless, the need to prioritize self-care over the care of others faced the nurses to moral challenges in providing healthcare services to patients.[3] Moreover, limitation of resources such as personal protective equipment, ventilator, ICU beds and as well as nursing shortage that affected patient care lead to the moral distress.[1] The Andrew Jameton introduced and defined moral distress for first time as "arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action"[4] so moral distress is a condition which someone despite having the knowledge and ability to act morally, is unable to take a morally correct action under the existing conditions.[5] A systematic frame work study shows that it also arises when one of the five main themes including beneficence, non-maleficence, respect for autonomy, equity, and efficiency is neglected.[6]

According to a systematic review, moral distress can be defined as "a situation involving a clash of moral values within the practitioner, among practitioners, and/or between practitioners and patients, concerning what was the morally right action to take, or as a situation in which the duties and obligations of health professionals were unclear".[7]

Moral challenges are a spectrum including "moral uncertainty, moral dilemma, moral distress, and moral outrage"[8] and individuals experience different levels of moral challenges depending on his/her conditions and forced to make a decision contrary to his/her beliefs and norms.[9] Moral challenges are an obstacle to making correct decisions and reduce the quality of care and have

serious effects on compliance with moral standards.[8]

Nurses as a backbone of healthcare system most exposed to moral challenges.[10] Previous studies have shown that most nurses suffer from moral distress in clinical settings.[8,11,12] In Iran, nurses also experience moderate to severe levels of moral distress in COVID-19 outbreak.[13,14] Similarly, a review study found that most nurses have experienced moral distress in the workplace that lead to burnout and affect their job position and the quality of patient care[11] and increase in mental health issues in COVID-19 outbreak.[15]

According to earlier studies, the most moral distress is associated with the end-of-life decisions, patient privacy, interactions with the patient and his/her companion, teamwork, ventilator-associated treatments, using anesthetics, and access to health care that led to moral distress and its outcomes.[8,12]

Although nurses exposed to moral challenges, during the COVID-19 pandemic, they faced with more moral distress due to the unknown nature of the virus and unpredictable conditions of the disease.[16] Considering that the experience of moral challenges during the COVID-19 pandemic as an emerging disease is different according to the socio-cultural context, this study explored the moral distress challenges in nurses during early phases of COVID-19 in wave one and two in Iran's cultural context.

Methods and Materials

Study Design and Participants

A qualitative study with conventional content analysis approach was conducted to explore the reasons of moral distress in nurses during COVID-19. Participants were 13 nurses caring for patients with COVID-19 in Intensive Care Units (ICU), medical units, surgical units, emergency units and pediatric units in three hospitals of Maragheh. The study was conducted in April 2020- January 2021, East Azerbaijan, Iran. At this point in time, nurses had experienced two severe waves of COVID-19 infection and had valuable experiences in line with moral challenges.

A purposive sampling with maximum variation in terms of age, gender, work experience and type of hospital ward was used to select the participants. Nurses who directly cared for patients with COVID-19 in Maragheh hospitals for at least three months were included in the study.

Data Collection

Data collected through individual in depth semi-structured interviews using an interview guide (Table 1).

The interviews usually began with open-ended question such as: could you please tell me about your experiences of moral distress challenges delivering patient care during COVID-19 and other questions and next followed according to the responses of the participants. Furthermore, complementary probing questions such as "would you, please explain in more details?" and "please make an example" were used. The interview guide continually was revised according to the textual data.

Table 1. Semi-structured interview guide

Date: **Start time:** **End time:** **Participant's code:**
Warm up and main questions • Could you describe any experience you have in neglecting moral principles in patient care? • What were your challenges in observance of moral distress in delivering patient care? • Based on your experience, could you talk about cause's moral distress in patient care? • Would you describe situations in which you confront moral distress in patient care? • Could you describe any experience you have in the patient care which you think is unmoral?
Probing questions: • Why do you think that is? • What is the connection between these two things? • Would you please explain in more details? • Please explain your experience more. • Can you give an example?
General follow-up question: • Any additional experience you would like to share?

Each interview lasted between 30 to 60 minutes, till the participants stopped sharing their experiences. The interviews were continued until data saturation, where no new idea or information regarding categories and subcategories emerged.[17]

Data Analysis

All interviews were transcribed verbatim and read several times to achieve a sense of the whole. Then, the transcript data labeled with conceptual names (codes). The developed codes were then grouped into categories based on similarities. Each subcategory with a similar mean was grouped as categories, and categories are grouped as main categories. MAXQDA version 10 software was used to organize the textual data.

Trustworthiness

In this study the criteria suggested by Guba and Lincoln was used to evaluate the credibility of the data.[18] The primary codes were checked by four of the participants to verify before conclusion. The final categories were revised with the research team and were interrelated and synthesized into a comprehensive understanding. Moreover, the researchers documented all of the research process to provide the data's audibility and transferability and it was presented to two related researchers for control. The guidelines of consolidated criteria for reporting qualitative research (COREQ) was used for providing this manuscript to ensure our paper comprehensively addressed transparent reporting of our research.[19]

Results

Most of the participants in the study were female and

all of them had at least two years of work experience at the bedside. The details about the participants are presented in Table 2.

Poor crisis management was the main category in the reasons of moral distress in nurses during COVID-19. Poor crisis management have three categories including trial and error in care of patients with COVID-19, negligence in performing professional duties and inappropriate organizational structure. Each of these categories is presented in Table 3 and explained as follows:

Trial and Error in Care of Patients with COVID-19

Ambiguous nature of COVID-19 and insufficient recognition about it cause the medical care and treatments revolve around a trial and error approach that leads to moral distress among clinical staffs. This category extracted from two subcategories as follows:

Uncertainty About Correct Methods of Patient Care

This subcategory refers to the inadequacy of available knowledge and evidence to accurate care and treatment of patients. Patient care under uncertainty causes moral uncertainty and inability to decide on which action to take or knowing what strategy is preferable. This can be understood from the expression of one of the participants who states:

> *"... when a patient had dyspnea and difficult breathing, the highest percentage of oxygen was not sufficient for him/her, and accordingly, we should intubate the patient, even though we were not sure if this was the right thing to do or not because experience had convinced us that the patient is more likely to die after intubation and there was no hope for the patient to survive". (P3)*

Deficiency of Knowledge and Professional Skills in Patient Care

Participants believed that lack of cognitive information and/or professional ability for doing procedures would lead to nurses' inability to care of patients with COVID-19. This perspective was described as follows:

> *"... before COVID-19, it* was *easy for us to perform the intubation procedure because we were dealing with an unconscious patient, but the patient who is conscious does not let the laryngoscope place in the back of his/her throat and should use sedatives. On the other hand, we were afraid that the patient would arrest as the dose of the medicine increases, we therefore reduced its dose. We couldn't perform the intubation procedure. We tried to do it several times and observed that it would take half an hour". (P6)*

Table 2. personal chrectristics of the participants (n = 13)

Participant	Gender	Age (year)	Work experience (year)	Type of hospital ward
P1	Male	26	2	Surgical
P2	Female	41	16	ICU
P3	Female	36	13	Medical
P4	Male	31	6	ICU
P5	Female	48	18	Emergency
P6	Female	30	8	ICU
P7	Male	45	21	Surgical
P8	Female	41	18	Pediatrics
P9	Female	35	11	ICU
P10	Male	50	26	Emergency
P11	Female	40	20	Medical
P12	Female	28	3	ICU
P13	Female	26	2	Emergency

Negligence in Performing Professional Duties

This category refers to the conditions that a nurse fails to meet the standards because of fear of spreading the disease and/or lack of adherence toward duty of care due to high workload. This situation resulting in mental and physical injury of patients. This category extracted from two subcategories including avoiding contact with the patients with COVID-19 and failure to adhere to professional commitment:

Avoiding Contact with the Patients with COVID-19

Participants believed that the fear of spreading disease prevents the correct principles of patient care and act as a barrier to adherence to the moral issues.

Fear of close to a patient with COVID-19 caused nurses to avoid them that lead to failure to some special care for these patients. Some of the participants mentioned their experiences as below:

Table 3. Summarizing the results of study including main categories and sub-categories

Categories	Sub- categories
Poor crisis management	
Trial and error in care of patients with COVID-19	Uncertainty about correct methods of patient care
	Deficiency of knowledge and professional skill in patient care
Negligence in performing professional duties	Avoiding contact with the patients with COVID-19
	Failure to adhere to professional commitment
Inappropriate organizational structure	Lack of resources
	feeling of lack of support
	Job dissatisfaction

"... because of my fear of COVID-19 infection, when I wanted to connect the oxygen source to the patient, I was not in close contact with him/her and I was afraid that COVID-19 would be transferred to me. This made the patients unable to obtain the right and needed care, especially the patients who had the acute problems". (P8)

"…In this situation, we tried to communicate less with the patients with COVID-19 and visit him less often. For example, the auxiliary nurses instead of changing them every two hours; they changed the patient's position once per shift". (P4)

Failure to Adhere to Professional Commitment

A lack of professional conscience and commitment due to high workload affect the quality of care. According to the participants, because of high workload, did not have the possibility to follow the moral principles in response to large-scale emergencies during COVID-19. This can be understood from the expression of participants:

"...As the volume of patients admitted during the COVID-19 pandemic is high, the observance of moral principles decreased. The patient who gets intubation needs important care that the nurses cannot perform it when they are busy. Sometimes we see the patient has an arrest and no one notices. After a few minutes, nurse realizes it because he/she is busy". (*P8*)

In this area, another participant said:

"... because patients do not have a companion during the outbreak of COVID-19 infection, auxiliary nurses are being faced with a heavy workload, which can affect the moral issues. The patient does not have a companion to give him/her breakfast, and he/she can't eat his /her breakfast. Given that the patient should take off his/her mask while eating breakfast and the risk of COVID-19 infection was high; therefore, everyone was afraid of giving breakfast to the patient. I saw that it was 12:00 a.m., patient has not eaten his/her breakfast yet, and he/she is also hungry". (P9)

Inappropriate Organizational Structure

This category refers to the challenges exist within the organization that prevents the observance of moral principles. This category extracted from three subcategories:

Lack of Resources

This subcategory indicates the lack of medical equipment and medicine, as well as the lack of human resources. According to the participants, the lack of equipment such as masks and sterile gloves as well as ventilators has prevented the provision of proper services to patients so that compliance with moral standards has been challenged. In support of this idea some of the participants stated:

"... the shortage of medicine and the lack of new equipment can cause medical malpractice. When there is no medicine, we report that there was no medicine and the patient received no medicine. For example, there are medicines that should be given to the patient using a monitor, but there is no monitor and most of our monitors are broken down, so we should inject the medicine to him/her without using a monitor, which can cause complications. Also, we need a Venturi mask for the patient, but there is no Venturi mask in the ward, and accordingly we should administer oxygen to a patient using the same normal masks, which would definitely hurt the patient". (P1)

"...If I don't feel safe in my workplace, I will not visit the patients. If the personal protective equipment is given to me, I can work safely. During the outbreak of COVID-19, if there are no face masks and other personal protective equipment, the nurse will visit the patient for a moment and do his/her duty carelessly and also he/she doesn't pay much attention to the patient". (P6)

In addition, the lack of human resources and inappropriate allocation of them make nurses unable to comply with moral principles despite their inner desire. Besides them the high workload and the high probability of spreading COVID-19 in some units of the hospital, this dissatisfaction was understandable:

"...the shortage of the healthcare personnel has made us unable to provide the care for the patients well and it has happened that the patient died without receiving appropriate care and this is unmoral". (P10)

"... Here, the healthcare personnel are not distributed in the units *based on their knowledge and skills. They forcefully send a nurse to a ward that has no work experience in that ward, while his/her duties should be assigned based on his/her expertise"*. (P13)

Feeling of Lack of Support

The participants believed that working in a stressful atmosphere that not supported in working environment which leads them to not pay attention to moral principles.

"...the atmosphere of our hospital is such that if a healthcare worker does a medical error, he/she has to hide it and a healthcare worker don't have the courage to report his/her medical error because he/she will be mistreated". (P11)

The negative atmosphere and bad communication from the officials make them feel uncomfortable and unappreciated so that they no longer consider themselves obliged to respect the rights of the patient:

"... When a doctor does a medical error and we remind him/her, he/she says that you are a nurse and also are not in a position to blame me. Therefore, even though I am interested in my work, when they do not value me, it makes me unable to fulfill my work duties carefully and as a result I cannot follow moral principles". (P7)

Moreover, nurses receive disrespect in many cases from patient's companions that have negative effects on them and cause diminished commitment to the moral issues.

Job Dissatisfaction

Most of the participants felt dissatisfied and demoralized due to lack of interest in the nursing profession. They believed that such feeling affects the quality of patient care. In this regard, one of the participants said:

"...When a person is not interested in his/her job, he/she becomes unmotivated and cannot carefully fulfill his/her work obligations. In this situation, he/she does not have the patience with the patient and leading to an increase in medical errors and overlooking moral principles". (P9)

Moreover, failure to meet financial needs was another reason for job dissatisfaction among nurses.

Discussion

Poor management of the crisis that happened in the COVID-19 pandemic was an important factor that has somehow made all the categories appear bold. Uncertainty about treatment methods and the provision of healthcare services to patients based on trial and error can be considered as one of the main reasons for moral distress in nurses. Lack of knowledge among healthcare workers about COVID-19 and the lack of evidence-based treatments regarding emerging infectious disease make the medical staff deal with the disease based on their previous knowledge and in some cases use symptomatic treatments.[20,21]

In this regard, other studies reported the use of alternative medicines for COVID-19 treatment, and the provision of healthcare services to patients based on taste and trial and error that are associated with clinical complications for patients in some cases.[22] This situation, especially for people with underlying medical conditions who received palliative treatment, provides the medical staff with more serious moral distress, which was consistent with our study.[23,24] It can be said that the lack of a codified treatment plan, or in some cases being busy with other restrictions, caused the planning in this direction to be deficient.

The lack of knowledge about the symptoms and transmission of COVID-19 was one of the main factors contributing to fear of this disease,[25] and also Brooks considered the lack of information as one of the main causes of stress in nurses.[26]

Moreover, fear of being in close contact with the patient caused nurses to be negligent in performing their professional duties, and this provides nurses with a serious moral distress. A study in Thailand also demonstrated that the fear of COVID-19 made the health care workers reluctant to be in close contact with patients and also they were unwilling to admit the patients with COVID-19, which was in agreement with our study.[27]

On the other hand, a heavy workload of nurses during the COVID-19 pandemic caused their adherence to professional obligations to be seriously affected. In line with these results, other studies demonstrated that a heavy workload of nurses during the COVID-19 pandemic could affect their adherence to professional commitments and performing their professional duties.[28]

The increase in the number of work shifts and the increase in workload due to the increase in the number of hospitalized patients were among the reasons that affected their professional services and provided them with numerous moral challenges. Similarly, other studies also indicated that nurses had significantly more workload during COVID-19 pandemic and there was a shortage of personal protective equipment and, and also in most cases, the shortage of human resources was one of the findings of these studies.[21,28] The limitation of human power is a factor that the officials should think about in the long term, and at the moment of the crisis, it may not be possible to manage the lack of human power as it should be.

The shortage of resources was another reason for moral distress in nurses, which made it a challenge to provide the standard services to patients. Personal protective equipment plays a key role in maintaining the health and safety of healthcare workers during the COVID-19 pandemic.[29] The shortage of personal protective equipment at the start of the COVID-19 outbreak was one of the main concerns among healthcare workers, which disturbed their peace of mind and fear of infection had become a concern in them.[30] Also, it caused nurses to avoid dealing with patients with COVID-19.[28] the existence of guidelines for the allocation of resources could have greatly improved the performance of the treatment system. It should be mentioned that in times of crisis in some health and treatment units, excessive use of equipment also happens, which can be effective in improving the conditions with training on the correct way of use and proper management of resource distribution.

In addition, the shortage of equipment like ventilators made it difficult to make a decision about selecting a patient. Selecting a patient to use a ventilator was a moral challenge faced by nurses. In the study conducted by White and Lo, participants reported such an experience,[31] and also in the present study, similar experiences were obtained during the shortage of both medicines and equipment. However, the existence of a codified treatment plan will prevent this moral challenge to some extent.

The existence of a non-supportive system and lack of officials' support as well as in some cases their coercive behavior and bullying were factors contributing to moral challenges and moral distress among nurses.[32] Studies conducted in other countries have emphasized the existence of both a supportive organization and a supportive atmosphere.[21] In order to create a suitable environment for providing high-quality healthcare services by nurses and increase their job satisfaction, organizations should create a strong support system in order to reduce the nurses' stress levels.[33] The lack of support during the COVID-19 pandemic, is an important factor contributing to their job dissatisfaction, which is consistent with previous study.[34] Despite high resilience,

nurses have significantly more job dissatisfaction because they are being faced with a heavy workload during the COVID-19 pandemic and thus the willingness to leave their jobs has increased. Therefore, this study and other studies should emphasize the importance of providing a supportive environment in order to increase the nurses' resilience levels and strengthen their professional commitment.[35] Due to the limited human power, the officials are forced to use the current nurses to cover their needs, which naturally may not give much satisfaction, but the proper arrangement of the nurses can prevent this problem to a large extent.

The lack of time for nurses to conduct interviews and the fear of expressing some of their experiences regarding moral distress in the clinical setting was one of the main limitations of this study, which was attempted by interviewing in several parts based on the nurses' free time in some interviews and explaining the confidentiality of information, we tried to solve these limitations to some extent. Although the exposure of most of the nurses to the patients with COVID-19 in different units of the hospital and having rich experiences were the strengths of our study.

Conclusions

We should learn from the pandemic that happened, and in such cases, it seems that providing a codified treatment plan at the first opportunity is effective to prevent trial and error in the treatment and care of patients. Providing the latest information about the disease or the crisis that has happened manages the stress and work pressure to some extent, but the presence of psychological counseling for nurses and resilience training for nurses should not be neglected, so that not only their stress can be better managed, but also in providing safe care also be taken an effective step.

The existence of instructions for allocating resources and equipment is a matter that is not common in the country under normal conditions, and it is natural that it can be challenging in crisis conditions. Long-term planning for providing sufficient human resources is an issue that should be the priority of the officials. On the other hand, it should be noted that nurses are trained for normal as well as crisis situations, perhaps their insufficient training also has an effect on aggravating challenges in crisis situations.

Research Highlights

What is the current knowledge?

- During the early stages of the COVID-19 pandemic, nurses experienced feelings of being overwhelmed, anxious, and morally conflicted due to the complexities of the situation.

What is new here?

- The lack of accurate disease information can harm patient care by hindering nurses' ability to provide safe and effective care, educate patients, and support families.
- The limitations of manpower and equipment were one of the reasons for creating moral distresses in nurses.

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Authors' Contribution

Conceptualization: Ebrahim Aliafsari Mamaghani, Mina Hashemiparast, Farzaneh Soleymani.
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Writing–review & editing: Ebrahim Aliafsari Mamaghani, Mina Hashemiparast, Farzaneh Soleymani.

Competing Interests

The authors have no conflict of interest to declare.

Data Availability Statement

The datasets are available from the corresponding author on reasonable request.

Ethical Approval

The ethics committee of Maragheh University of Medical Sciences (MRGUMS) approved the study protocol (Approval ID: IR.MARAGHEHPHC.REC.1399.009). The aim and process of the study were explained to the participants and written informed consent was obtained. The interviews were recorded anonymously using code numbers and participants were assured of anonymity. All interviews were recorded using a voice recorder with previous permission of the participants. The participants were informed that they could withdraw from the study at any part of the study without any consequences.

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