

Original Article

A crisis management model with an ethical distress management approach for nurses in hospitals of Iranian Universities of Medical Sciences

Rasoul Khazaei¹ , Morteza Hazrati^{2*} , Nima Ranji Jafarudi² 

¹ Department of Management, As.C, Islamic Azad University, Astara, Iran.

² Department of Management, BaA.C, Islamic Azad University, Bandar Anzali, Iran.

* **Corresponding author and reprints: Morteza Hazrati**, Department of Management, BaA.C, Islamic Azad University, Bandar Anzali, Iran.

Email: 1289469776@iaui.ac.ir

Received: 08 Oct 2025

Accepted: 13 Nov 2025

Published: 09 Dec 2025

Abstract

Background: In today's world, various unforeseen events can threaten material and human resources, and in the meantime, hospitals and health care center employees are directly affected by events and crises. The current study was conducted to design a model of crisis management with the moral distress management approach for nurses in the hospitals of the Iranian Universities of Medical Sciences, with a mixed approach.

Methods: The present study was an applied research project in terms of its purpose and was exploratory in nature, having been analyzed using a mixed (qualitative-quantitative) approach. In the first stage, the qualitative method and in-depth interviews were used to identify the model components. In the qualitative part, 16 university experts were selected by a purposive sampling method. The theme analysis method was employed to analyze the qualitative data using MAXQDA software. Next, in order to fit the model designed in the qualitative part, the structural equation modeling approach was used in the quantitative part.

Results: According to the results of the qualitative section, 7 main themes, including job burnout, the coronavirus disease situation, strategy, professional ethics, job stress, moral distress, crisis management, and 15 sub-themes were identified. In the quantitative section, it was found that there is a significant relationship between the leadership of digital transformation and the factors, and the designed model has an acceptable fit.

Conclusion: moral distress has always been associated with a negative effect on mental health in the form of anxiety and failure in the professional life of nurses, and in the absence of compatibility, the negative effects of moral distress are revealed in their professional life in the form of feelings of worthlessness, anger, depression, shame, and discomfort in life.

Keywords: Crew Resource Management, Healthcare; Ethical Dilemmas; Ethics; Hospitals; Iran University of Medical Sciences; Nurses.

Cite this article as: Khazaei R, Hazrati M, Ranji Jafarudi N. A crisis management model with an ethical distress management approach for nurses in hospitals of Iranian Universities of Medical Sciences. *Soc Determinants Health*. 2025;11(1):1-8. DOI: <http://dx.doi.org/10.22037/sdh.v11i1.50601>

Introduction

According to Aghaei et al. (1), crisis is a situation or an incident that needs a response beyond the available

capacities and requires requesting help from outside the place of occurrence to be managed and controlled. In this regard, the

process of preventing the occurrence, correct and logical response when it occurs, and restoring the organization's conditions to the pre-crisis situation is called crisis management. One of the main problems of the country's hospitals is in the field of crisis management. As the most important part of the health system, hospitals are of particular importance in the crisis response phase, and their main goal is to prevent accidents and unfortunate incidents while caring for patients and preventing negative results of treatment processes (1, 2).

Obviously, a foundation like team and inter-professional training and coordination maneuvers is needed for coordination and coherence between the various agencies involved in the crisis. This is even though, unfortunately, the dominant approach of education for the groups involved in the crisis is single-professional approaches, which not only do not prepare them for team performance, but also lead to the creation of an individualistic spirit (1). Complex approaches related to the philosophy of utilitarianism, which in the contemporary world cast a shadow on healthcare environments, put more pressure on nurses to reduce care costs day by day. This has caused many problems for nurses; one of the most important of these problems is "moral distress" (3).

Nursing is one of the important and vital jobs in the healthcare system of a country, and nurses, as the main members of the medical care team, are at the forefront of providing medical services, and their performance largely determines the quality of medical care. Also, moral distress can have harmful effects for patients, health providers, related organizations, and society in economic, psychological, and social dimensions. If they face moral distress, major problems, including mental and physical, are created in them, and the quality of service will also be reduced. In this case, research on the moral

distress of nurses will be able to provide assistance to health system managers and prevent major problems in this field. Moral distress, which is one of the big and irreparable crises for the hospital and medical sector, can be neutralized if this crisis is properly managed and methods are used to neutralize it (4).

According to what was said, the main purpose of the research was to explain the situation of moral distress of nurses in crisis management and to design a suitable model of crisis management with the approach of moral distress management among nurses in the country, to train and prepare nurses to deal with all kinds of natural and human dangers and unexpected threats. From this point of view, the basic question of the current research was: what is the appropriate model of crisis management with the moral distress management approach, and what are the factors affecting crisis management with the moral distress management approach?

Hosseini et al. (5), Richardson (6), and Licht (7), as theorists in the field of crisis management, have classified the tasks of the crisis manager in three stages: before, during, and after the crisis. Before the crisis, these duties include predicting the crisis, preventing it, and creating organizational readiness to deal with it. During a crisis, preventing the peak of the crisis and controlling the crisis are part of the tasks of crisis management. Finally, the after-crises step includes normalization, restoration, and reconstruction. (5-8)

First proposed by Jameton (9), moral distress includes psychological imbalance caused by ethical decisions that do not lead to ethical performance due to existing organizational constraints. Several causes, such as futile care, ineffective communication with dying patients and their families, unnecessary treatment measures, and expectations of patients and their families, can contribute to

moral distress. The range of effects of moral distress is different. In addition to causing physical and mental symptoms (anxiety, depression, insomnia, headaches, nightmares), moral distress can lead to increased stress and job burnout, as well as a lack of job satisfaction in nurses. These conditions will cause a decrease in the quality of care and the ability of people to cope with the existing conditions, and they will cause absenteeism and lead to people leaving the profession.

Moral distress is described as a feeling of discomfort or mental disorder due to the inability to take appropriate moral action despite a diagnosis due to obstacles such as time constraints, resistance from superiors, medical restrictions, institutional policies and personal or religious ethical considerations. In addition, nursing professional goals are in the moral context, so when achieving some of these goals, such as protecting patients from harm, providing care in a competent and timely manner, and maintaining a healthy environment for patients, is impossible, and nurses will inevitably experience moral distress. Moral distress has many negative consequences on the health of nurses. Among these disorders, we can mention the disturbance in the general health of nurses and, as a result, withdrawal from patients, moving in departments, leaving the job, lack of nursing manpower, and reducing the quality of patient care (4).

Methods

The present study was applied research in terms of its purpose, and the design of mixed exploratory research was of a sequential type, because the use of the mixed method provides a more complete picture and a deeper understanding of the studied phenomena in order to achieve the research goals. The target population in the qualitative section included experienced academic experts. The theoretical saturation method

was used to determine the sample size. In this method, the sampling process continues until new findings from the interviews are obtained. In this research, theoretical saturation was achieved in interviews with 16 people. The purposive sampling was used to select the samples. In this method, researchers consider criteria for selecting samples. Research criteria for selecting samples were having a Ph.D. degree in the field of management, having research experience related to the field of research, and executive work experience in the field of digital transformation leadership. Data collection tools in the qualitative section were semi-structured interviews. The interviews were conducted as individual meetings, and the average time was 45 minutes. At the beginning of each session, the purpose of the research was clearly explained, then the interview questions were asked, and the answers were recorded. After the completion of each interview, the participants' statements were converted into written text and coded in the MAXQDA software. Then the findings were analyzed using the theme analysis method. According to Boyatzis (10), theme analysis is able to create a proper connection between researchers of different disciplines. This method enables researchers to facilitate the process of converting observations and findings into interpretations for others. In general, theme analysis is a good way to communicate the concepts between researchers in different fields, with different orientations, and the connection between different philosophical approaches between theorists and practitioners. Six stages of theme analysis were used. Also, the retest reliability method was used in order to check the reliability of coding. In this method, three selected interviews were coded in two periods of three weeks. At each coding, similar codes were called agreement and dissimilar codes called non-agreement, and

reliability between codes was calculated using the formula (10)

The findings of the qualitative part were analyzed using the theme analysis method in six steps. In the first phase, the researcher's immersion in data began to reveal the depth and breadth of the data content. In the second step, open coding was done paragraph by paragraph. In open coding, which was the first step in the implementation of the theme analysis strategy, the key points of the interviews were identified and coded. At this point, the interviews yielded 97 codes. The final step involved organizing all coded data summaries and classifying different codes into selective codes. Actually, the researcher began examining his codes and thinking about how many codes may be linked to form a broad subject. Ninety-seven chosen codes were acquired in this step. The researcher developed a collection of themes and reviewed them to start the fourth step. Sub-themes were refined and shaped in two stages throughout this phase. A review at the coded

summarization level was part of the initial phase. The validity of the sub-themes with respect to the data set was examined in the second step. The researchers discovered fifteen sub-themes at this point. Once the themes are satisfactorily depicted, the fifth stage starts. At this stage, the researcher identifies the aspects of the data that each main topic comprises, presents, defines, and revises the themes for analysis.

Results

After going back and forth among the themes, the researchers finally found 94 selective codes, 15 sub-themes, and 7 main themes. Table 1 shows the final codes extracted from the qualitative section.

Next, the structural equation modeling is used in order to fit the model achieved from the qualitative part, as well as the relationship analysis. Figure 1 shows the crisis management model with a moral distress management approach.

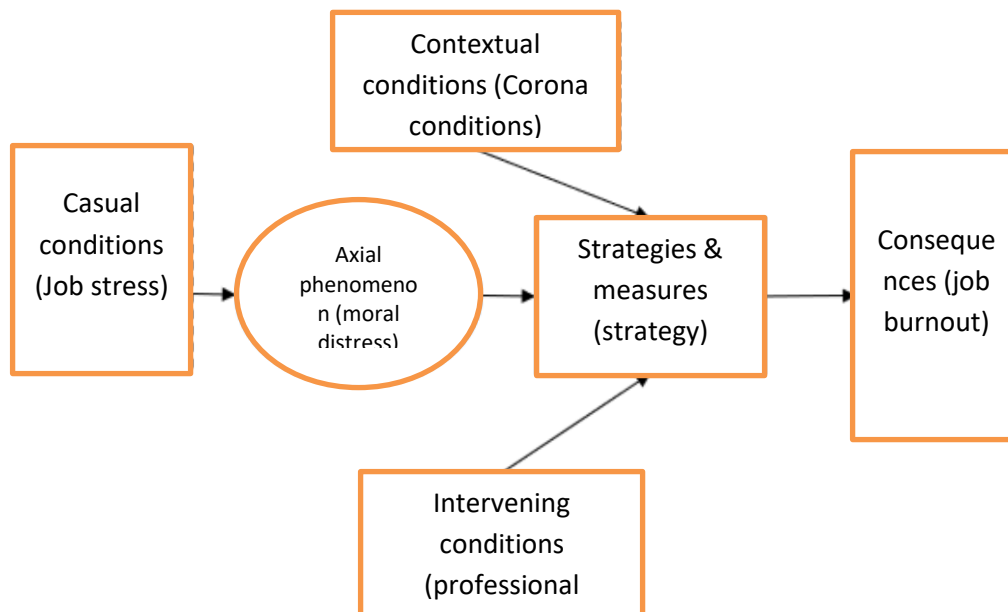


Figure 1: The primary conceptual model extracted from the qualitative part

Table 1. Selective codes, Sub-themes, and Main themes

Paradigm	Main themes	Sub-themes	Codes
Core Phenomenon	Moral Distress	Internal Factors	Presence of Fear, Mental Conflicts, Low Self-confidence, Medical Culture, Endangerment of Ethical Interaction, Ethical Tension, Moral Pessimism, Moral Indifference, Negative Emotional Experience, Leaving the Nursing Profession, Decreased Empathy, Pessimistic Attitude
		External Factors	Hospital Policies and Regulations, Poor Communication with Colleagues, Hierarchical Structure, Reduced Efficiency, Social Restriction, Organizational Support.
		Clinical Factors	Inability to Reduce Patient's Pain and Suffering, Insufficient Care, Futility of the Treatment Process, Risk of Healthcare Reforms, Doctors' Inability to Act According to Professional Values.
	Crisis Management	Crisis Situation Management	Protecting the Organization from Harm, Rebuilding the Organization after Crisis, Dealing with Crisis Situations, Preparedness to Deal with Crisis, Crisis Prevention, Assessment of Potential Risks.
		Strategic Crisis Management	Incomplete Information during Crisis, Coordination Drills, Team Training, Crisis Management Knowledge, Active Decision-making, Managerial Decision Support.
Causal Conditions	Occupational Stress	Environmental Stress	Reduced Service Quality, Physical Problems, Financial Consequences of Stress for the Organization, Poor Lighting at Workplace, Improper Performance of Work Tools, Dealing with Clients, Responsibility for Others' Lives, Lack of Adequate Rest during Work, Night Shift, High Workload, Productivity Obstacle, Reduced Efficiency.
		Perceived Stress	Reduced Quality of Care, Dissatisfaction, Moral Distress, Mental Tension, Psychological Problems, Chronic Stress.
Background Conditions	COVID-19 Situation	Physical Effects of COVID-19	Inability to Transfer Calmness to Patient, Protected Communication with Patient, Reduced Productivity, Rationing of Scarce Resources.
		Psychological Effects of COVID-19	Incomplete Sense of Encouraging the Patient, Decreased Staff Morale, Moral Harm, Emotional Distress Caused by COVID-19,
Strategies and Actions	Strategy	Short-term Strategy	Existence of Emergency Planning Committee, Strategy to Deal with Risks, Time Management.
		Long-term Strategy	Promoting Principles of Professional Conduct, Avoidance, Prioritization of Major Risks, Reducing Negative Consequences of a Crisis.
Intervening Conditions	Professional Ethics	Operational Professional Ethics	Greater Exposure to Ethical Issues, Higher Capacity to Face Ethical Issues, Constant Exposure to Ethical Decision-making, Close Contact with Patient Experiences.
		Value-based Professional Ethics	Rules Based on One's Conscience and Nature, Moral Supervision, Value Judgments, Most Desirable Social Relationships, Ethical Conflicts.
	Consequence	Emotional Burnout	Developing Negative Views toward Self and Others, Work Pessimism, Reaction to Stress Stimuli, Lack of Job Fairness, Symptoms of Job Burnout Syndrome, Depersonalization, Emotional Fatigue, Loss of Work Motivation, Perceived Inability in Decision-making, Occupational Depression.
		Burnout due to Inefficiency	Proactive Approach, Physical Fatigue, Strict Rules and Regulations, Feeling of Personal Inefficiency, Exhaustion of Personal Resources, Lack of Energy, Employee Absenteeism, Reduced Job Efficiency, Lack of Responsibility, Increased Healthcare Costs.

Discussion

The current research has been conducted to provide a model for crisis management with an ethical distress management approach for nurses in hospitals of Iranian universities of medical sciences. Based on the findings of this research, finally, 6 main dimensions, including causal, contextual, strategic, intervening conditions, and consequences, have been extracted. Motivating conditions that are under the group of causal factors, including job stress, are two main components i.e., environmental stress and cognitive stress. Regarding the findings, it can be said that stress has always existed as a factor in the work environment and is therefore important. The state of nervous tension or, in scientific terms, "stress", is a condition in which a lot of tension and pressure is applied to human emotions and thinking processes and physical states. If the nervous pressure is chronic and beyond the limit, it leads to a risk to the human ability to adapt to the environment. Among these, factors such as long and continuous time for doing work or high volume of work, working at unusual hours of the night and doing shift work, lack of sufficient rest while working, being responsible for the lives of others, the possibility of encountering and conflicting with clients or colleagues, improper performance of work tools and equipment, inappropriate lighting in the work environment, inappropriate and non-ergonomic postures, etc., are job stressors in the work environment.

The outcomes gathered in this study align with the conclusions of a research investigation conducted by Khodai-Kalaki et al. (11). In this research, two dimensions of environmental stress and perceptual stress regarding stress (as the causal conditions of crisis management) were identified. Among the indicators related to environmental stress identified in this research, the reduction of service quality, physical problems, the financial consequences of stress for the organization,

inappropriate lighting in the work environment, inappropriate performance of work tools and equipment, dealing with clients, being responsible for the lives of others, lack of Adequate rest during work, night shift and high volume of work. Also, indicators such as reducing the quality of care, dissatisfaction, moral distress, mental tension, psychological problems, and persistent stress were identified in relation to perceived stress.

As a profession full of physical and emotional stress, the nursing profession during the pandemic period was associated with emotional reactions, the most common of which was anxiety resulting from the spread of COVID-19 among people, especially in the affected countries. With the spread of COVID-19 in the world and the death rate of this disease, health care workers who were on the front line of dealing with this disease were exposed to more psychological disorders and anxiety than others. In the conditions of facing the coronavirus pandemic and witnessing the suffering and death of patients and enduring constant stress, nurses suffered various degrees of mental and emotional disorders. This result is supported by Cotecchia et al. (12) and Schuldt's (13) findings that uncertainty in diagnosis and treatment protocols, wearing heavy protective equipment for a long time, difficulty in providing care, rapid spread of the virus, impossibility to see families and fear of family contamination, inefficiency of infrastructure and equipment, etc., are among the reasons that cause an increase in psychological disorders in nurses.

The findings of the study were consistent with those of Poulou et al. (14), who found that contingent elements such as time, place, culture, and economy, which affect the main strategies, as intervening elements, include general and broad conditions; the nature of these elements is such that the way to respond and react to them depends on the situation. The nature of these factors, which have the greatest

impact on macro strategies, is variable over time. In the current research, operational professional ethics and value-oriented professional ethics were identified as intervening elements, and it is necessary to pay attention to the importance of these, as well as deal with the issue of how this knowledge should be managed when providing service to society. As a result, professional ethics is considered a ritual to maintain professional identity and behavior in the workplace. Based on the findings of this research, adherence to professional ethics of nurses has an impact on their management of moral distress. Furthermore, as demonstrated by Heslop et al. (15), the level of professional ethics of nurses determines the level of success in moral distress management.

The findings of this research is also corroborated by the results of Morli et al. (16) and Cong et al. (17), who asserted that strategic factors in this research are a very important and fundamental element in the discussion of human resource management development, especially the discussion of crisis management strategies, because this type of approach can affect all the functions and actions of individuals and organizations, and seek efficiency and effectiveness through applying all skills and aligning environmental conditions. A combination of long-term and short-term strategies in relation to the main strategies was identified as the strategic factors of this research. The indicators identified regarding the main strategies of crisis management with the approach of managing the moral distress of nurses in the hospitals of the universities of medical sciences in Iran include the existence of a planning committee for unexpected events, strategies to deal with risks, time management, promoting the principles of professional practice, and avoiding and prioritizing more important risks and reducing the negative results of a crisis. Regarding these strategies, it can be said that in relation to the professional life of nurses, a kind of careful management is

needed to implement a specific plan to reduce the level of occupational stress and moral distress of nurses by reducing job pressures and predicting possible risks.

Author's contribution

RK, MH and NRJ developed the study concept and design. RK acquired the data. RK, MH and NRJ analyzed and interpreted the data, and wrote the first draft of the manuscript. All authors contributed to the intellectual content, manuscript editing and read and approved the final manuscript.

Informed consent

Questionnaires were filled with the participants' satisfaction and written consent was obtained from the participants in this study.

Funding/financial support

There is no funding.

Conflict of interest

The authors declare that they have no conflict of interests.

References

1. Aghaei MH, Ebadi A, Aliakbari F, Vafadar Z. The effectiveness of crisis management education based on inter-professional approach on military nurses' ability to confront with crisis. *Journal of Military Medicine*. 2020; 22(1):54-63. [https://doi: 10.30491/JMM.22.1.46](https://doi.org/10.30491/JMM.22.1.46)
2. Azadian E, Torbati HR, Kakhki AR, Farahpour N. The effect of dual task and executive training on pattern of gait in older adults with balance impairment: A Randomized controlled trial. *Archives of gerontology and geriatrics*. 2016; 62: 83-9. [https://doi: 10.1016/j.archger.2015.10.001](https://doi.org/10.1016/j.archger.2015.10.001)
3. Fogel BL, Perlman S. Clinical features and molecular genetics of autosomal recessive cerebellar ataxias. *The Lancet Neurology*. 2007;6(3):245-57. [https://doi: 10.1016/S1474-4422\(07\)70054-6](https://doi.org/10.1016/S1474-4422(07)70054-6). PMID: 17303531
4. Beikrordi A, Rabiee S, Khatiban M, Cheraghi MA. Nurses distress in intensive care unit: a survey in teaching hospitals. *Iranian Journal of Medical Ethics and History of Medicine*. 2012; 5(2):58-69.
5. Hosseini SM, Nemati M, Jeddi F, Salehi E, Khodabakhshi A, Madaeni S. Fabrication of mixed matrix heterogeneous cation exchange membrane modified by titanium dioxide nanoparticles:

- Mono/bivalent ionic transport property in desalination. *Desalination*. 2015; 359:167-75. <https://doi:10.1016/j.desal.2014.12.043>
6. Richardson V. Conducting research on practice. *Educational researcher*. 1994;23(5):5-10. <https://doi:10.2307/1177027>
 7. Licht JD, Gossel MJ, Figge J, Hansen UM. *Drosophila* Krüppel protein is a transcriptional repressor. *Nature*. 1990;346(6279):76-9. <https://doi:10.1038/346076a0>
 8. Karimi S, Yadollahi A, Nazari-moghadam R, Imani A, Arzani K. Screening of Almond (*Prunus dulcis* (Mill.)) Genotypes for Drought Tolerance. *JBES*. 2012;6(18).
 9. Jameton A. *Nursing practice: The ethical issues*. Englewood Cliffs, NJ: Prentice-Hall; 1984:6.
 10. Boyatzis RE, Renio Case A. The impact of an MBA programme on managerial abilities. *Journal of Management Development*. 1989;8(5):66-77.
 11. Khodai-Kalaki M, Andrade A, Fathy Mohamed Y, Valvano MA. Burkholderia cenocepacia Lipopolysaccharide Modification and Flagellin Glycosylation Affect Virulence but Not Innate Immune Recognition in Plants. *mBio*. 2015;6(3):00679. <https://doi:10.1128/mBio.00679-15>. PMID: 26045541; PMCID: PMC4462625.
 12. Cotecchia F, Vitone C, Sollecito F, Mali M, Miccoli D, Petti R, et al. A geo-chemo-mechanical study of a highly polluted marine system (Taranto, Italy) for the enhancement of the conceptual site model. *Scientific Reports*. 2021; 11(1):4017. <https://doi:10.1038/s41598-021-82879-w>
 13. Schuldt B, Buras A, Arend M, Vitasse Y, Beierkuhnlein C, Damm A, et al. A first assessment of the impact of the extreme 2018 summer drought on Central European forests. *Basic and Applied Ecology*. 2020; 45:86-103. <https://doi:10.1016/j.baae.2020.04.003>
 14. Poulou MS, Reddy LA, Dudek CM. Relation of teacher self-efficacy and classroom practices: A preliminary investigation. *School Psychology International*. 2019;40(1):25-48. <https://doi:10.1177/0143034318798045>
 15. Heslop JA, Rowe C, Walsh J, Sison-Young R, Jenkins R, Kamalian L, Kia R, Hay D, Jones RP, Malik HZ, Fenwick S, Chadwick AE, Mills J, Kitteringham NR, Goldring CE, Kevin Park B. Mechanistic evaluation of primary human hepatocyte culture using global proteomic analysis reveals a selective dedifferentiation profile. *Arch Toxicol*. 2017;91(1):439-452. <https://doi:10.1007/s00204-016-1694-y>
 16. Morli A, Chan JH, Duraisingam S, Anparasan E. *Intelligent Teacher Bot*. 2021.
 17. Cong W, Yaoyao Y, Jun X, Jianta W, Feiqing W, Jiquan Z, et al. Convenient Method for Preparing α -Ketoarylthioamide by Air Oxidation under Base Conditions. *Chinese Journal of Organic Chemistry*. 2020;41(1):370-375. <https://doi:10.6023/cjoc202002011>