



Ethical Decision-Making Process of Nursing Managers: A Grounded Theory

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Abstract

Background: Making ethical decisions is significant in health systems committed to ethics. Meanwhile, determining how nursing managers incorporate ethical values in their decision-making processes is crucial in developing ethical decisions and achieving the ethical goals of healthcare organizations. This study aims to explore the ethical decision-making process in nursing managers.

Methods: This qualitative study was carried out in Tehran hospitals in 2020. Data was analyzed using the Grounded Theory method according to Strauss and Corbin's 2015 approach. Twenty-three in-depth semi-structured interviews were conducted with 20 nursing managers and 3 nurses. Purposeful and theoretical sampling continued until theoretical saturation was achieved.

Results: Conscientiousness was a core variable in managers' ethical decision-making processes. Nursing managers working in unreliable organizational environments rely on 4 strategies (client orientation, cross-evaluation, contingency decision-making, and prioritizing individual rights over organizational regulations) to gain the comfort of conscience and overcome the anxiety they experience when consciousness is not met at work.

Conclusion: Senior managers should take unmanageable organizational environments seriously as a cause of concern for nursing managers. Creating healthy interpersonal relationships and setting up a creative atmosphere effectively improve the organizational environment. Managers' sensitivity to teaching ethical and managerial principles and developing a positive attitude towards applying ethics can facilitate managers' ethical decision-making processes. Also, employing empowered managers in decision-making and giving them sufficient autonomy in describing their responsibilities can effectively reduce their decision-making barriers.

Keywords: Decision-making, Ethical, Nursing, Management, Grounded theory

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Introduction

Managers are constantly making decisions, and because of the humane and ethical nature of the system, health system managers are faced with complex decision-making issues (1). To make the right decisions under these conditions, managers must have the ability to make the right decisions (2). Ethical decision-making allows managers to decide what is good or bad (3). Making ethical decisions in health organizations will improve relationships among colleagues, increase integrity among individuals (providers, patients, and health system operators), and turn the healthcare system into an ethical organization (4).

The critical, challenging issue in studies regarding managers' ethical decision-making is how managers incorporate ethics into their decision-making process or how managers make ethical decisions (5). Most managers claim their decisions are based on ethical principles, but

sometimes the results reveal otherwise (6). Most managers claim their decisions are based on ethical principles, but sometimes the results reveal otherwise (6). Chan and Anathram stated that because managers make decisions mostly based on their judgments, which are caused by their attitude toward moral issues, they may make mistakes. In other words, it should be said that ethical decisions should be formulated based on ethical principles and ethical standards to minimize the possibility of mistakes (5). Given the different ethical approaches available for decision-making and their various outcomes, how nursing managers choose a particular approach and process for their decision-making and under what conditions they do so, becomes a salient issue (7).

Identifying the ethical decision-making process and the various conditions and factors affecting it can be significant in improving the decision-making process and ensuring that, in different situations, ethical values



are met in decision-making (8). Also, having a specific framework and process in ethical decision-making can help analyze the conditions and factors influencing the decision-making process and reduce the risk of ethical errors in nursing managers (9).

A review of ethical decision-making models that use different approaches in applying ethical values and principles in managers' decision-making shows that few studies, such as Davis (10), Kitchener (11), and Erde's models (12), have been proposed for managers' ethical decision-making in healthcare systems. Although these models share a similar scope, they are mostly proposed for the decision-making of physicians and managers rather than nurses. Existing models regarding decision-making in healthcare systems are more focused on clinical judgments and have not addressed the ethical decision-making process in nursing managers by use of a managerial approach (13). Therefore, as decision-making is a process in nature and subject to different conditions and factors, organizational structures and patronage (9, 12), and since existing models in healthcare systems are not related to nursing practice and nursing managers, the present study aims at explaining ethical decision-making processes in nursing managers in Iran's healthcare system.

Methods

The present study is a qualitative study conducted using a grounded theory approach, and the aim was to explain the ethical decision-making process of nursing managers in Tehran hospitals from March 2019 to February 2020. The research question was, "How do nursing managers make ethical decisions?"

Sampling was done purposefully and continued as theoretical sampling (14). A sampling of nursing managers (head nurse, supervisor, and metron) was conducted according to inclusion criteria (having a current management position or past management experience, ability to explain experience, and having management experience in hospital environments). After analyzing the preliminary data, sampling continued theoretically until data saturation was achieved. The research setting was the hospitals in Tehran. To achieve maximum diversity in sampling, nursing managers were selected with maximum variation in age, gender, years of management experience, years of working experience, levels of management, education level, and hospital setting. Finally, 20 nursing managers and 3 nurses were interviewed. The demographic characteristics of participants are listed in Table 1.

Participants were interviewed over 10 months. Twenty-three in-depth semi-structured individual direct interviews were conducted with 23 participants. The interview duration was 45 to 90 minutes. The average interview time was 55 minutes. The place and time of the interview were determined based on the participants'

Table 1. Characteristics of study participants

Characteristics	No.
Age (year)	39.4
Work experience (year)	15.5
Managerial experience (year)	7.2
Gender	
Male	8
Female	15
Level of management	
Nurse	3
Head nurse	8
Supervisor	10
Matron	2
Education Level	
BSc	12
MSc	9
PhD	2
Hospital setting	
Governmental	12
non-Governmental	11

choice and consent. The participants' convenience was considered throughout the interview. At the beginning of the interview, the purpose of the study was explained to the participants, and after obtaining the participants' written informed consent and demographic information, the main questions of the interview were asked. The first interviews were unstructured and open-ended questions, as follows: 1) Please describe your decision-making experiences on your regular work day. 2) Please explain what factors and conditions caused you to make ethical decisions in your work environment. 3) Please explain how you make decisions in different situations. 4) Do your managers follow ethical principles in their decisions? Express your experiences.

Questions like "What do you mean by...?", "Can you explain more about...?" followed the above. The search continued for a closer detection of the participants' experiences. The analysis of the interviews determined the process of subsequent interviews, and sampling continued theoretically. In theoretical sampling, semi-structured questions were asked to reach data saturation. Data saturation was obtained when no new data or category was added, and the categories themselves and the relationship among them had reached saturation. In theoretical saturation, all categories were integrated and made consistent by the core variable.

For analysis, grounded theory was used in accordance with Strauss and Corbin's 2015 approach. The researcher implemented the collected data, and the text prepared for the interview was studied several times for a comprehensive understanding of its content. Then, the

meaning units of the text were identified and initially coded. Initial codes were compared and classified based on similarities, differences, and content. Data analysis of theoretical sampling continued until theoretical saturation was achieved, which eventually integrated their categories, dimensions, and characteristics by the core variable. Using memo writing (14, 15), the researcher recorded his attitude and perspectives about the data, used it to analyze the data, and continued the study process. Constant comparative analysis (14) made it possible to compare newly obtained data with other data and also to integrate them into a common category. It should be noted that all interviews were conducted and analyzed by the researcher under the supervision of the research team. MAXQDA version 10 software was used for data management.

For the study to be valid, Lincoln and Guba's (1982) criteria were used (16). For credibility, the transcribed interview was returned to the participants after the coding. It was confirmed that the researcher and participants shared a common understanding of the research. Prolonged engagement of the researcher with collected data and the process of analysis and coding implies immersion in the data. The process of coding and analyzing data was also monitored by a professional research team with sufficient experience in qualitative research, management, and ethics. Maximum variation was also observed in the sampling of nursing managers. To increase the fittingness, the researcher tried to document all stages of the research, including data collection, analysis, and the classification of categories and subcategories in a manner that is fully measurable by others. To increase fittingness, the researcher attempted to carefully document and report (both orally and in written form) all stages of the research, including data collection, analysis, and categorization into categories and subcategories, so that others could review them and those specialized in qualitative studies to assess and, if required to revise the applied procedure.

The ethical principles of autonomy, confidentiality, and anonymity were considered by the participants. To enter the study, all participants were asked to provide oral and written informed consent, and their participation in the study was optional. Before taking part in the interview, the participants were informed about the purpose and method of the study, and written informed consent was collected from them to record their voices and to take notes during the interview.

Results

The results below are represented by the Strauss and Corbin approach.

Open Coding: Identifying Concepts and Developing Concepts in Terms of Their Properties and Dimensions

Data analysis resulted in the development of 5 main

categories (including "Humanist in decision-making, Sensitivity of the manager to decision-making, Unreliable organizational environment, Pay attention to participatory decision-making, and comfort of conscience with psychological hurting") and 15 subcategories. The categories and subcategories are shown in Table 2.

Main Concern

Anxiety because of a lack of consciousness

The main concern of managers in this study was anxiety because of the lack of conscientiousness. The uncertain organizational climate was a contextual factor that caused various problems, such as concerns regarding the non-compliance of patients' rights, the fear of harming individuals, the fear of the consequences of unethical decisions, and the fear of being tormented by nursing managers.

Participant (head nurse, female, 43 years) stated,

"The hospital chief wanted to give one of our beds to his stable friend, while the patient to whom the bed belonged was waiting to be hospitalized to receive chemotherapy. I told them that I would not allow it. That night, we had a dispute on the phone, and I tried my best to advocate for the patient".

Analyzing Data for Context

Uncertain Organizational Environment

Data analysis showed that an unstable and unreliable organizational environment is the main context of concern for nursing managers. Therefore, managers feel anxious about the lack of consciousness and support.

Participant (head nurse, male, 38 years) stated,

"We had a chemotherapy patient who didn't have the money for the medicine, so they discharged him. I told the authorities, but they did not take any action. I had to take the patient to the corridor, and two hours later, he died. That day, I realized that the organization's interests are important first, and then the patients. I believe that our current treatment environment is dark".

Bringing Process into the Analysis

Conscientious Decision-Making

Data analysis showed that nursing managers feel anxious when they encounter unreliable organizational environments and tend to make decisions that would reduce their anxiety. Therefore, they make conscientious decisions using some strategies and try to resolve their concerns. Nursing managers here run all their decisions by their conscience, and if a decision is made by their conscience, they make that decision.

Decision-making strategies

Nursing managers use 4 strategies in making a conscientious decision: client orientation, cross-evaluation of managers and staff, contingent decision-making, and prioritizing

Table 2. Categories and subcategories of ethical decision making in nursing managers

Category	Subcategory	An example of open code
Unreliable organizational environment	Unsupportive organizational atmosphere	Weak communication relations
		Non-cooperative attitude of the system towards managers and personnel
		Lack of mutual trust among individuals
	Lack of a humanistic approach in decision-making	Having no clear decision-making policy
		Profitability of the organization
		Priority of organization rules over individuals.
	In effective leadership	Inefficiency of managers
		Policy-making in achieving the goal
	Prioritizing interpersonal relationships over organizational criteria	
Humanist in decision-making	Client orientation	Maintaining the patient's interests
		Respecting professional ethical values for personnel
		Flexibility in making decisions
	Cross-evaluation of managers and staff	Mutual support
		Interpersonal respect
		Interpersonal trust
	Contingent decision making	Decision-making based on conditions.
		Applying managerial approaches based on the situation
	Prioritizing individual rights over organizational regulations	Establishing a balance between resources and expectations
		Not performing the existing ethical strategy to support the patient
	Decision-making contrary to the existing legal guidelines for the patient-centered	
The sensitivity of the manager to decision-making	Professional assertiveness	The frankness of the manager in expressing her decisions
		The importance of the manager for the profession increases self-confidence in decision-making.
		Deal with employees
		Decision-making as a religious responsibility
	Individual commitment	Commitment of the manager to be accountable
		Continuous pursuit of decisions to achieve the goal
		Commitment to compensate for wrong decisions made
		Strict decision-making to prevent mistakes
		Manager's self-awareness in making decisions
	Insight	Consider the right evidence in making decisions.
		Purposefulness of the manager's decision-making process
		The importance of extensive knowledge of the subject before making a decision
Pay attention to participatory decision making	The importance of people's participation in decision-making	The importance of the manager to cooperate in cooperating to advance the activities of the department
		Prioritize participation over job descriptions.
		Ask for help from others before making a decision.
	Trying to gain a common understanding in decision-making	Solve departmental problems using good relationships with staff
		Use communication skills to engage people.
		Strive for good communication as an error prevention factor.
	Pay attention to contingent decision making.	Different approaches of the manager with the wrong staff based on the severity of the error
		Consider the different conditions of personnel in planning the department.
	Consider the fit between service and facilities.	
Comfort of conscience with psychological hurt	Inner satisfaction with decision-making	Peace of mind in any situation, seeking to take the right action towards people
		Gain peace of mind by seeking the trust of the staff.
	Conflict and confusion caused by circumstances	Verbal conflict with the superior manager because of the emphasis on the right decision
		Loss of managerial position following resistance to the superior manager's wrong decision

the individual over the organization's regulations. Client orientation means respecting clients' rights, including individuals, systems, and patients. By respecting this ethical principle, managers' ultimate goal becomes the individuals and their interests, and in so doing, they will not make any decisions that would somehow endanger their interests. Cross-evaluation is another strategy by which managers consider principles such as respect, support, and flexibility in their decision-making and try to build trust. Considering these values is a strategy by which managers can make decisions that are by these values and avoid making decisions that are not. Another strategy is situational decision-making. In this strategy, managers analyze the condition and situation of individuals and make decisions accordingly. Contingency decision-making allows managers to consider a person's situation and humanely treat them. Prioritizing individuals over organizational regulations is another effective strategy, which implies that while managers consider ethical principles in their decision-making, they might turn to different administrative strategies to respect and support the rights of patients and their staff, even though these strategies might be contrary to what the organization expects.

Participant (head nurse, female, 39 years) stated,

"We had a doctor who asked us to use less Betadine in treating wounds, to save something or not waste it. I told the doctor that the patient's life was in danger and that treatment quality was important, as the patient was paying for it as well, and it is not fair to treat him like this. I might even provide money from my pocket, but I would not provide lesser care".

Facilitating and confounding factors affecting the process

Managers' sensitivity towards decision-making and gaining a common understanding in communication are two factors that facilitate conscientious decision-making. Having insight and awareness about the situation, having a sense of commitment in decision-making, respecting ethical principles, and being assertive in deciding, make managers sensitive towards making ethical decisions. This sensitivity is a factor that facilitates the manager's ethical decision-making. In addition, managers who try to understand their staff and patients tend to make more conscientious decisions in which the individual's human rights and values are considered. Factors such as a manager's lack of independence and authority in decision-making are among the confounding factors in conscientious decision-making. In other words, managers' lack of independence and authority in making decisions does not allow managers to make good use of existing solutions to make conscientious decisions, and thus, the decision-making process is hampered.

Participant (Supervisor, female, 40 years) stated,

"I was a supervisor one night, and a staff member came

up and said my head nurse is not treating me fair... I didn't sleep until 4 AM to give him answers based on documents. Finally, I told him I had checked and that he had made a mistake. What I did was because of the commitment that I felt towards my personnel, and it made me sensitive to give him an explanation".

Participant (Metron, female, 45 years) stated,

"I had a supervisor who was a little young. He was often skeptical about his decisions and would not go through with them, or he was very influenced by others, which made most of his personnel unhappy with him, as they would say he was unreliable. In many instances, his subordinates were not supported and felt oppressed".

Decision-Making Outcome: comfort of conscience with psychological hurt

The four strategies used in conscientious decision-making reduce the managers' anxiety and leave them calm. When nurses and clients are satisfied and happy, their rights have been respected, and a sense of trust has been created, managers feel that their conscience is comforted. In addition to these positive outcomes, when managers have to make a decision that is contrary to the organization's regulations, they experience a sense of conflict with the system, and they feel guilty; as a result, they feel anxious and dissatisfied with the organization, which is discussed under the subject of psychological hurt. This is inherently perceived as a negative consequence of the organizational and legal conditions of healthcare systems, but it is not as significant as the outcome of having a comfort of conscience.

Participant (nurse, female, 34 years) stated,

"One of my staff was an addict. The nurse manager repeatedly called me in to report him, but since I was aware of his condition, that he was divorced and the breadwinner of his family, I never did anything to jeopardize his job, though. I am happy about it".

Integrating Categories

At this stage, using the storyline approach (13). The core variable was selected.

"Nursing managers worry about decision-making in unreliable organizational environments and become anxious due to the lack of conscientiousness. In this regard, managers use strategies such as client management, mutual respect, situational decision-making, and prioritizing individuals' (patient and nurse) rights over organizational regulations to make conscientious decisions. Managers' sensitivity and mutual understanding in communication facilitate conscientious decision-making, while their lack of independence and authority interferes with the conscientious decision-making process. Therefore, these strategies can help develop conscience relief even if managers have experienced trauma".

Conscientiousness was considered the core variable

since managers make all their decisions by reference to their conscience and values. All stated strategies are subsets of an individual's conscience, and conscientiousness can cover these strategies and reduce unified concerns at a higher level. The ethical decision-making process is illustrated using Grounded Theory in Figure 1.

Discussion

This study aimed to explore the ethical decision-making process in nursing managers, and conscientiousness was found to be a core variable in managers' ethical decision-making processes.

De Graaf states that moral intention is the mediating variable that influences moral decision-making and that all variables affect moral intention. They also mention organizational variables such as the organization's ethical culture, the ethical atmosphere, as well as the size of the organization as influential factors in the organization (17). Factors such as moral climate in our model are also among the underlying factors of conscience, which in Heines and Leonard's model is also expressed as an influential factor in the decision-making process.

Abtahi, in his ethical decision-making model for Islamic managers, introduces commitment to the right as a central variable. It also states that consultation increases the power of managers, and this is a solution that is

necessary for ethical decision-making because a decision-maker meets all the decision-making conditions (18). Conscientiousness in the present study is very similar to our model in terms of internality and morality. However, in our study, the internalization of ethical values is based on the internalized values of the manager. Of course, consultation and consensus have also been mentioned as effective factors in the conscientious model.

In his ethical decision-making model, Kitchiner points to various principles such as customer welfare, justice, and loyalty. He states that characteristics such as conscientiousness, honesty, and commitment are among the ethical principles managers must follow. Adhere to ethical decisions (11).

In his ethical decision-making model, Trevino also refers to the central concept called the control center. He states that people's inner values control their moral behavior and modify their moral behaviors and decisions (19). The control center in the Trevino model is very close to the concept of conscience in our model. Also, individual moderators are more related to the power and self-control of individuals in the decision-making process, which is on the opposite side of the factors that confuse our study, which is the deprived power of the manager.

In his ethical decision-making model, Wittmer introduces ethical sensitivity as an influential concept

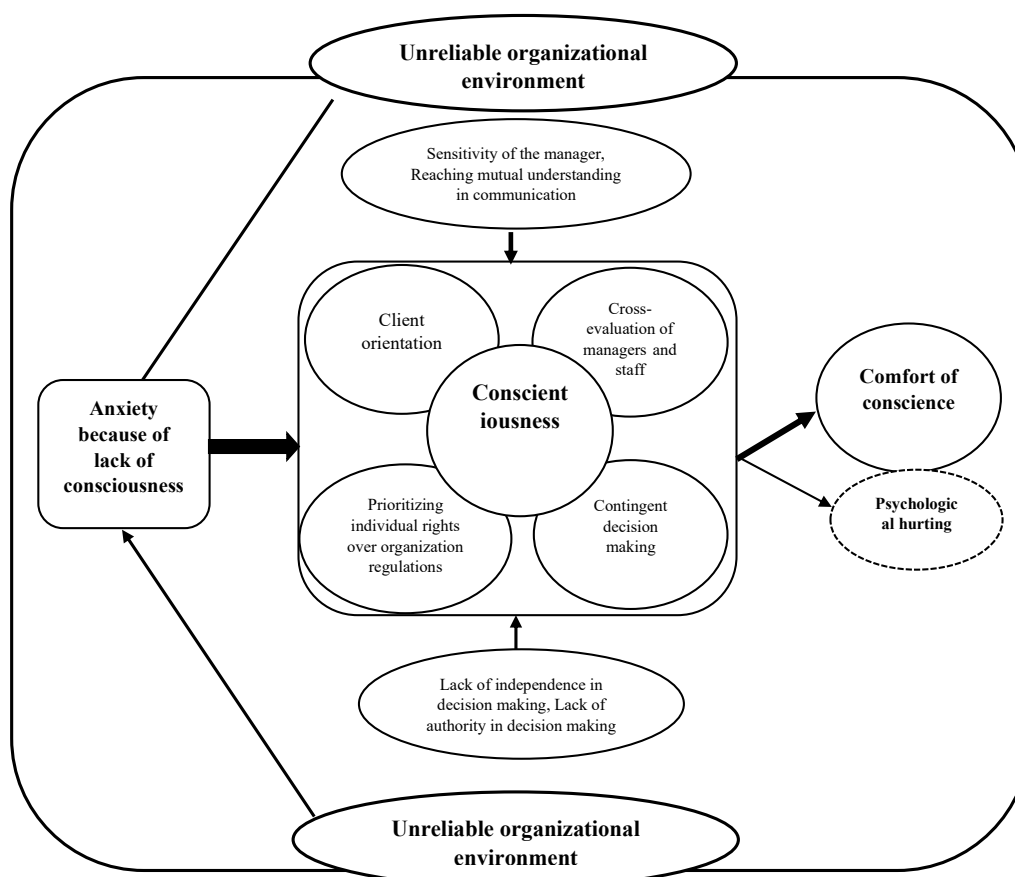


Figure 1. The Contextual Model of Conscientious Decision-Making as an Ethical Decision-Making Process in Nursing Managers

in the ethical decision-making process. In this model, individual and environmental factors have also been proposed as factors affecting this process. In this model, ethical sensitivity is expressed as an influencing factor in managers' ethical decision-making process (20). In our study, the moral sensitivity of managers is also stated as a facilitating factor that can affect the ethical decision-making process of managers in the direction of conscientiousness.

Javaheri et al state that there are key people in organizations, such as managers, supervisors, and co-workers, that a decision-maker can use to improve decision-making. Proper communication, consultation, and consensus with them can play an important role in improving moral decision-making (21). This strategy is in line with the strategy of mutual valuation in our model. In the conscientiousness model, the factors affecting the decision-making process are individual and organizational factors among the model's underlying factors.

Conclusion

The results of this study can be used in different areas of the nursing profession. Explaining the process and implementation of the descriptive model of conscientious decision-making can reveal many effective elements in the ethical decision-making of nursing managers. The unreliable organizational climate can be a factor that initiates the decision-making process, which senior managers and healthcare system planners should consider. Developing managers' sensitivity by teaching them ethical and managerial principles and developing a positive attitude towards them can be significant in facilitating ethical decision-making.

One of the limitations of the present qualitative study is that its results cannot be generalized to explain other cases. Also, investigating every individual's ethical concept and experiences was difficult, as individuals usually interpret and express their concept of ethics based on their attitude and knowledge about that situation.

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Competing Interests

The authors declared no conflict of interest.

Ethical Approval

This study was approved by the research deputy of Tarbiat Modares University with the ethics code (IR.MODARES.REC.1397.025).

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References

1. Yazdimoghaddam H, Mohamadzadeh Tabrizi Z, Zardosht R. Ethical care: nurses' experience of moral judgment in intensive care units. *J Qual Res Health Sci.* 2023;12(1):17-24. doi: [10.34172/jqr.2023.03](https://doi.org/10.34172/jqr.2023.03).
2. Zardosht R, Ghardashi F, Borzoei F, Akbarzadeh R, Vafi F, Yazdimoghaddam H, et al. Fear of the unknown, anxiety, and social isolation in Iranian patients with COVID-19, the grounded theory. *J Educ Health Promot.* 2023;12:360. doi: [10.4103/jehp.jehp_861_22](https://doi.org/10.4103/jehp.jehp_861_22).
3. Chen A, Treviño LK, Humphrey SE. Ethical champions, emotions, framing, and team ethical decision making. *J Appl Psychol.* 2020;105(3):245-73. doi: [10.1037/apl0000437](https://doi.org/10.1037/apl0000437).
4. Wege-Rost T. [Medical-ethical decision-making-contribution of the clinical ethics committee by ethics consultation and development of ethical guidelines]. *Med Klin Intensivmed Notfmed.* 2023;118(3):175-9. doi: [10.1007/s00063-022-00974-w](https://doi.org/10.1007/s00063-022-00974-w). [German].
5. Chan C, Ananthram S. A neo-institutional perspective on ethical decision-making. *Asia Pac J Manag.* 2020;37(1):227-62. doi: [10.1007/s10490-018-9576-x](https://doi.org/10.1007/s10490-018-9576-x).
6. Bush SS. Use of practice guidelines and position statements in ethical decision making. *Am Psychol.* 2019;74(9):1151-62. doi: [10.1037/amp0000519](https://doi.org/10.1037/amp0000519).
7. Nelson WA. Making Ethical Decisions. A six-step process should guide ethical decision making in healthcare. *Healthc Exec.* 2015;30(4):46-8.
8. Özden D, Arslan GG, Ertuğrul B, Karakaya S. The effect of nurses' ethical leadership and ethical climate perceptions on job satisfaction. *Nurs Ethics.* 2019;26(4):1211-25. doi: [10.1177/0969733017736924](https://doi.org/10.1177/0969733017736924).
9. Bracht J, Zylbersztejn A. Moral judgments, gender, and antisocial preferences: an experimental study. *Theory Decis.* 2018;85(3-4):389-406. doi: [10.1007/s11238-018-9668-6](https://doi.org/10.1007/s11238-018-9668-6).
10. Davis M. Developing and using cases to teach practical ethics. *Teach Philos.* 1997;20(4):353-85.
11. Kitchener KS. Intuition, critical evaluation and ethical principles: the foundation for ethical decisions in counseling psychology. *Couns Psychol.* 1984;12(3):43-55. doi: [10.1177/0011000084123005](https://doi.org/10.1177/0011000084123005).
12. Erde EL. A method of ethical decision making. In: Monagle JF, Thomasma DC, eds. *Medical Ethics: A Guide for Health Professionals*. Rockville, MD: Aspen Publishers; 1988. p. 476-91.
13. Moradi T, Sharifi KH. Clinical decision making in Iranian nurses: systematic review. *Quarterly Journal of Nursing Management.* 2022;11(2):1-13. [Persian].
14. Roshanzadeh M, Shirvani M, Tajabadi A, Khalilzadeh MH, Mohammadi S. The clinical learning challenge of surgery technologist students: a qualitative content analysis. *Payavard Salamt.* 2022;16(2):102-12. [Persian].
15. Roshanzadeh M, Vanaki Z, Sadooghiasl A, Tajabadi A,

- Mohammadi S. Explaining courage in ethical decision-making by nursing managers: a qualitative content analysis. *J Holist Nurs Midwifery*. 2021;31(4):254-62. doi: [10.32598/jhnm.31.4.2141](https://doi.org/10.32598/jhnm.31.4.2141). [Persian].
16. Guba EG, Lincoln YS. Epistemological and methodological bases of naturalistic inquiry. *Educ Technol Res Dev*. 1982;30(4):233-52. doi: [10.1007/bf02765185](https://doi.org/10.1007/bf02765185).
 17. de Graaf FJ. Ethics and behavioural theory: how do professionals assess their mental models? *J Bus Ethics*. 2019;157(4):933-47. doi: [10.1007/s10551-018-3955-6](https://doi.org/10.1007/s10551-018-3955-6).
 18. Abtahi H. Ethical decision-making model. *J Public Adm*. 1997;11(1):45-54. [Persian].
 19. Trevino LK. Ethical decision making in organizations: a person-situation interactionist model. *Acad Manage Rev*. 1986;11(3):601-17. doi: [10.5465/amr.1986.4306235](https://doi.org/10.5465/amr.1986.4306235).
 20. Wittmer DP. Developing a behavioral model for ethical decision making in organizations: conceptual and empirical research. In: *Ethics in Public Management*. Routledge; 2016. p. 57-77.
 21. Javaheri H, Amiri M, Seyed-Javadin SR, Farrahi A, Amin F. Presenting a model for ethical decision making of human resource managers: a study in pharmaceutical organizations. *Organizational Behaviour Studies Quarterly*. 2020;9(3):31-84. [Persian].