

Organizational Ethics Indicators in Iranian Hospital: An Importance-Performance Analysis

Abstract

Background: Organizational ethics focuses on the importance of how organizations behave when faced with specific situations and decisions. This study aims to identify and prioritize organizational ethics indicators in Imam Khomeini Hospital Complex (IKHC) in Iran. **Materials and Methods:** This was a mixed-method research project. To recognize hospital ethics indicators, 18 semistructured interviews were conducted and 38 indicators were identified through thematic analysis. In the next stage, a quantitative approach was adopted to use the importance-performance matrix for data analysis. This part was a descriptive survey with a statistical population consisting of nurses, medical, clinical, and administrative staff. The questionnaire was distributed using the random sampling method, and a total of 349 samples were collected. **Results:** Based on the interviews and open coding, 73 themes were identified for organizational ethics indicators and classified into two main groups: “ethics drivers in hospital” and “personal ethics.” After measuring content validity, 35 indicators of organizational ethics in IKHC were examined in terms of importance and performance. The results showed that nine indicators had high importance and poor performance, 11 had high importance and performance, nine had low importance and performance, and finally six indicators had low importance and high performance, and according to these findings, practical suggestions were put forward. **Conclusions:** Based on the identified indices and by applying importance-performance analysis, it is recommended to continually assess the status of ethics in hospitals and offer strategies for improving organizational ethics.

Keywords: Behavioral research, healthcare sector, mathematical model, medical ethics, organizational ethics

Introduction

Many organizations face the challenge of creating an ethical institution.^[1,2] The development of behavioral ethics led to a full understanding of ethics, decision-making, and behavior concepts within and outside organizations and societies.^[3] Clinical ethics issues frequently arise due to wider structural or organizational ethics issues.^[4] Many organizations have collapsed because of ethical problems, thus attracting a lot of research on ethical issues and the effectiveness of ethical theories.^[5] Further studies into the healthcare organizational ethics literature largely focus on management and leadership issues.^[6] Some researchers have highlighted three elements of business ethics and health ethics: integration, responsibility, and choice.^[7] Part of the problems and ethical issues arise due to the ethical attitudes and behaviors

of nurses and nurses.^[8] Patients and their relatives expect the medical staff to take the necessary measures to prevent such incidents.^[9] Hospital leaders need to find ethical solutions for issues related to conflict of interests with stakeholders.^[10]

In Iran, according to the 2015 report on the environmental protection of Tehran, 28 out of 700 active medical centers in Tehran have received environmental warnings since the beginning of this year due to the problem of sewage and waste.^[11] Based on the findings, the ethical implications of organizational decision-making about hospital’s stakeholders impact on public views.^[12] Ethics is the focus of business researchers because it affects decisions, behaviors, and outcomes.^[13] At the organizational level, there is a great interest in ethics because people care about structures, processes, and confronting ethical dilemmas.^[14] In hospitals, a multitude of

Amir Ahmad Shojaei¹, Bahareh Mahbanooei², Amin Farahani³, Ali Asghar Pourezat⁴

¹Medical Ethics and History of Medicine Research Center, Tehran University of Medical Sciences, Iran, ²Department of Public Governance, Faculty of Governance, University of Tehran, Iran, ³Department of Business Creation, Faculty of Entrepreneurship, University of Tehran, Tehran, Iran, ⁴Department of Public Administration, Faculty of Management, University of Tehran, Tehran, Iran

Address for correspondence:
Dr. Bahareh Mahbanooei,
Ph.D. in Organizational Behavior Management, College of Farabi, University of Tehran, Qom, Iran.
E-mail: b.mahbanooi@ut.ac.ir

Access this article online

Website: <https://journals.iwwo.com/jnmr>

DOI: 10.4103/ijnmr.ijnmr_468_21

Quick Response Code:



How to cite this article: Shojaei AA, Mahbanooei B, Farahani A, Pourezat AA. Organizational ethics indicators in Iranian hospital: An importance-performance analysis. Iran J Nurs Midwifery Res 2023;28:593-603.

Submitted: 13-Dec-2021. **Revised:** 19-Nov-2022.

Accepted: 20-Dec-2022. **Published:** 08-Sep-2023.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

ethical and moral challenges are often present when patients and their families direct uncivil behavior toward clinicians and hospital employees.^[15] One way of achieving applicable organizational ethics is to develop and implement ethical action plans in the organization because doing so improves ethics at the individual, managerial, and clinical levels.^[16] Researchers have elaborated on how ethical programs affect managers' ethical behaviors, and therefore, paying attention to ethical codes and written plans in this field can result in a series of appropriate ethical behaviors.^[17] Professional ethics are very broad in terms of variety, for instance, medical ethics, education ethics, etc., and are part of the corporate ethics that help to improve the organization's position in the business area. When it comes to organizational ethics, occupational and professional ethics follow suit. Professional ethics is a branch of ethics that analyses the ethical tasks of a profession and related ethical issues.^[18] Organizational ethics create a capacity to reflect values in the organization's decision process and allow managers to use these values in management and organization.^[4] Racism is one of the basic problems in the field of healthcare.^[19] A participant stated, "Sometimes the accent of the townspeople or the clothes of different ethnic groups are ridiculed or looked at with sarcasm by doctors and medical or administrative staff" (Participant 5). To ensure the effective use of healthcare services, organizational ethics depend on consideration of the specific characteristics of the organization, including business ethics and bioethics.

Imam Khomeini Hospital Complex (IKHC) is the largest hospital complex in Iran and the Middle East. Nevertheless, related documents and initial interviews with patients (and their companions), official employees, nurses, and other medical staff revealed that the organizational ethics maturity is low. One of the problems involving ethical behaviors is the loss of public confidence, which has increased the importance of this issue. The vision statement of IKHC declares it to be "advanced and reliable in offering diagnostic, therapeutic, educational and research services in Iran." To be reliable, it is important to reduce unethical behaviors. So, this study aims to address certain questions to assess and identify the organizational ethics indices in IKHC. The main question is: What are the dimensions and indices of the IKHC organizational ethics? The other questions are related to identifying the importance of the organizational ethics model in recognizing the performance of the identified organizational ethics model in IKHC, and determining the priorities to improve the components of the organizational ethics.

Materials and Methods

The present study was an exploratory mixed-method research. In this type of study, first the researcher tries to understand the hidden aspects of the phenomenon through a qualitative method, and then measures the observed aspects using a quantitative method.^[20] To better understand

the phenomenon of organizational ethics, the thematic analysis technique (which includes both open and selective coding procedures)^[21,22] was used as part of the grounded theory research method.^[23] Next, in the quantitative part, importance-performance analysis was used to investigate the status of organizational ethics indicators in the case.^[24] Importance-performance analysis is among the soft operational research methods,^[25] and this part is considered a descriptive survey.

To recognize hospital ethics indicators, 18 interviews were conducted and 38 indicators were identified using the thematic analysis method on November 24, 2018. This research generally seeks to answer such questions as: "What are the components of the organizational ethics model in the hospital?" and "What are the ethical breaches in the hospital?" Taking into consideration the goals and questions of the research, the researcher first examined the transcripts of the interviews. Encoding the statements was carried out in a process that went back and forth, so the selective coding steps were not clearly separate from each other and were completed through an interactive process, coupled with open coding and selective coding. The experts involved in this part of the study were specialists in organizational ethics in the healthcare industry. They comprised mostly of professionals working in hospitals of Tehran University of Medical Sciences and Healthcare Services, and other university experts in ethics, organizational culture, and strategic management in the following three categories: 1- Professors and organizational ethics specialists in healthcare centers, especially hospitals; 2- Hospital managers who practically create strategies for the implementation of ethics in the organization and influence the formation and culture of organizational ethics in hospitals; 3- Experienced doctors and nurses, and managers of occupational in IKHC. The validity of the interviews was measured in terms of the obtained encodings using the case agreement method (reliability between two encoders/evaluators). For this purpose, a physician and a visiting lecturer at Tehran University were asked to collaborate as research partners (encoders). First, they conducted the coding regardless of the previous codes and then compared the three interviews conducted by the second person and inserted the results in the formula below. Thus, the percentage of agreement on the topic was used as the reliability indicator of the analysis. The reliability between two coders is obtained as a percentage of two times the number of agreements divided by the total number of codes.^[26] Based on the results, the total number of codes filed by the two encoders was 279, the total number of agreements between these codes was 91, and the total number of codes was equal to 38. The reliability between encoders in this study was estimated at 67.30% using the formula above. Considering the fact that reliability was higher than 60%,^[26] the reliability of the encodings was approved.

In the next step, the importance-performance matrix was used for data analysis. The statistical population included nurses and medical, clinical, and administrative staff. The questionnaire was distributed by the random sampling method and 349 samples were collected.^[27] To evaluate the validity of the questionnaire, content validity was used. Content validity deals with how representative and comprehensive the items are in creating a scale and is assessed by examining the process by which the scale items are generated.^[28] For this purpose, the questionnaire was approved by three faculty members and experienced specialists who had a degree related to medical ethics and three experts experienced in the field of organizational ethics. Moreover, a questionnaire with 35 items was designed to assess the importance and performance of organizational ethics at the hospital level, asking the experts the following questions: 1) How important are the questionnaire indicators in measuring hospital ethics? The responses were rated by a five-point Likert scale, (1–5, worst-best). According to the results, the average importance was above 3, and none of the indicators were deleted from the questionnaire; 2) Which of the following indicators is clear and explicit to you? The responses were rated by a five-point Likert scale, (1–5, worst-best). According to the results, the average transparency was above 3, and none of the indicators were deleted from the questionnaire.

To determine the reliability of the questionnaire, Cronbach's alpha was run using IBM SPSS software 26. For this purpose, 35 questionnaires were distributed among the representative samples and then the obtained data were used to calculate the Cronbach's alpha at 0.95 for 35 indicators, which is higher than 0.70. According to the nature of this research, experts on organizational ethics in the health industry, especially hospitals in medical sciences universities and health centers of Tehran, as well as other academic experts in ethics, organizational culture, and strategic management were consulted. Purposive sampling was applied for the interview section, and for the quantitative part, the snowball sampling method was used. Three sampling stages were assigned to the thematic analysis, and finally 18 interviews were conducted. As for gender, there were 12 men and 6 women, and in terms of age distribution, the interviewees were in the range of 40 to 50 years and had an average work experience of 20 years. In the first stage, after visiting hospitals and making observations and preparing the interview protocol, 10 initial interviews were conducted and the key categories were identified. Next, the interviewees began to ask questions about morality. The second round consisted of three interviews with a theoretical saturation goal and was done using theoretical sampling. Finally, after identifying the categories and ensuring their theoretical saturation, the third round of interviews was conducted. The objective of the subsequent five interviews was to provide

theoretical examples of the categories and identify the relationships between them to form the basis for their theoretical refining. Ultimately, 349 questionnaires were completed. This article was based on a research project requested by Imam Khomeini Hospital and was assigned their respective code of ethics. The research unit of this hospital made the necessary arrangements and with their permission and consent, the questionnaire was distributed among the personnel within 7 days, and those who had time completed it. In this section, the stratified random sampling method was used. The hospital staff were placed in four categories, the sum of which was 3,300 people. The Cochran sampling method was used to determine the sample size, and based on the volume of the statistical population and the Cochran formula with a 5% error assumption and 95% confidence level, the sample size was estimated at approximately 345 people.

Ethical considerations

In this study, all relevant ethical codes were observed. The author conducted a comprehensive search to identify all eligible studies in this area. The content review was done without bias, and the principle of fidelity and authors' rights in the use of content were respected. The respondents participated voluntarily in this research and their names were not recorded at the time of completing the questionnaires, and the information obtained was used only in line with the objectives of the study to maintain the principle of confidentiality. The current research was titled "Designing a Model of Organizational Ethics in Imam Khomeini Hospital Complex". The code of ethics approved in the hospital is IR.TUMS.MEDICINE.REC.1397.601.

Results

To explain the phenomenon of organizational ethics, the results of the thematic analysis were summarized as follows. The data analysis procedure was applied to the treatment staff, various hospital wards (with focus on the areas emphasized by the experts), hospital management, and organizations associated with the hospital, and describes the "organizational ethics of the hospital." Tables 1 and 2 describe the two categories of "ethics drivers in the hospital" and "personal ethics."

The concept of organizational ethics is presented in Figure 1, explained by "ethics drivers in the hospital" and "personal ethics."

With regard to the use of statistical techniques, first it should be clarified whether the data collected from distribution is normal or non-normal. Since the normal distribution of the collected data must be used to test the hypotheses, parametric tests can be used if the data is non-normal. To measure the normality of the questionnaire, the Kolmogorov–Smirnov test was used (IBM SPSS software 26). Based on the results of the Kolmogorov–Smirnov test the data distribution was normal.

Table 1: Ethics drivers in the hospital

Major Subject	Minor Subject	Concepts
Ethics drivers in hospital	Collaborative decision making in hospital	Maintaining the principle of in-hospital consultation
		Coordination of hospital wards
	Organizing ethics in hospital	Informing the hospital staff about confirmed decisions
		Prevention of chaos and overcrowding in hospital
		Keeping the gender ratio of staff
		Establishing a balance between supply and demand in hospital
		Acquiring the latest technology in hospital
	Hospital culture improvement	Providing for the patient's companion's welfare
		Applying the art of management/administrative intelligence in managing hospital
		Avoiding patient's companion exploitation
		Paying attention to the patient's companion's welfare
		Paying attention to the nature of hospital esthetics
	Social responsibility of the hospital staff	Creating a trusting atmosphere in hospital
		Maintaining patient confidentiality
		Environmental responsibility in hospital
		Economic sympathy in hospital
	Attention to education in hospital	National patriotism
		Inductive approach to ethics education in hospital
	End evaluation of hospital staff	Increasing patient awareness
Holding ethics workshops in hospital		
Monitoring the workflow of hospital wards		
A healthy monitoring system of hospital procedures		
Maintaining justice and fairness in hospital		
Ethical application of technologies in hospital	Avoiding competitive payments to doctors	
	Creating a healthy competitive atmosphere among doctors	
	Maintaining patient confidentiality and privacy	
	Accuracy in importing patient information	
	Facilitating medical procedures	
	Using computer technologies to save paper	
	Promoting use of emerging technologies in hospital	
Hospital technologies management	Automated reception in hospital	
	Ease of communication with hospital departments	
	Feedback on performance ethics in hospital	
	Innovative planning in hospital	
	Improving hospital performance	
Attention to meritocracy in hospital	Electronic coordination in hospital	
	Applying process-based approach in hospital	
	Competency-based management in hospital	
	Competency of hospital directors	
		Competent staff selection in hospital

In response to Question 5 of the research, the importance of organizational ethics in IKHC was examined through a survey of 349 employees of the compound. Question 5: What is the importance status of each of the indicators of the organizational ethics model in IKHC in terms of its key stakeholders? The averaged items were based on a Likert scale ranging from 1 to 5, and the opinions of experts are presented in Figure 2. Based on the results, the importance of all items is estimated above 3 (out of 5).

Question 6: What is the performance status of each of the indicators of the organizational ethics model in IKHC in terms of its key stakeholders? In response to

Question 6, the level of organizational ethics in the hospital was examined through a survey of 349 hospital employees. According to the results, the mean test of an independent society was determined. Figure 3 shows the performance status of the organizational ethics model in IKHC.

In response to the last question, the research is based on the results of questionnaires completed by 349 participants. In Figure 4, the horizontal axis represents the performance of organizational ethics indices in the hospital, which is used to test the average of a community to judge its functional status. What are the priorities for improving

Table 2: Personal ethics

Major Subject	Minor Subject	Concepts
Personal Ethics	Professional Ethics	Competency (professionalism in healthcare) Informed consent of the patient Contentment in medical profession Responding accurately to patients and their companions Saving the patient's time Privacy in hospital Occupational health and safety compliance Commitment to treating patients Following hospital rules and regulations Informative and transparent relationship with patients Job satisfaction and affection in healthcare Confidential treatments in hospital Seeking justice in healthcare Moral courage in healthcare Self-sacrifice to facilitate hospital services Principles of medical consultation Healthcare job responsibilities Humility healthcare Selflessness and dedication to patients Fair conduct with patients Flexibility and adherence to treatment Showing respect for patients Respect and attention to the patient's views Politeness in hospital Doctors' self-respect Being open and honest with patients Patient transparency Effective doctor-patient interaction and communication Doctors' friendliness Empathy for patients Patient confidentiality Avoiding insults to minorities in hospital Cooperation with hospital staff
	Interactive Ethics	



Figure 1: “Ethics drivers in the hospital” and “personal ethics”

organizational ethics components in Imam Khomeini Hospital Complex? The vertical axis represents the ultimate weight (importance) of the organizational ethics model in the hospital [based on the results of Figures 2 and 3]. The cut point was also obtained from the mean of all the points in the performance dimension (value of 2.59) as well as the importance dimension (value of 4.15). Based on Figure 4, the organizational ethics model can be analyzed and organized as follows: The first quadrant is a critical area (priority and focus area, red points). The first priority pertains to the first quadrant, i.e., critical measures, which are of high importance and low performance and are presented in red. The following indicators were identified in the hospital: Rightful appointment of officials; Fair enforcement of the recruitment process; Congestion management in hospital; Just enforcement of organizational processes for all colleagues and personnel; Equitable distribution of resources and opportunities; Fair behavior in dealing with colleagues and personnel; Creating balance in

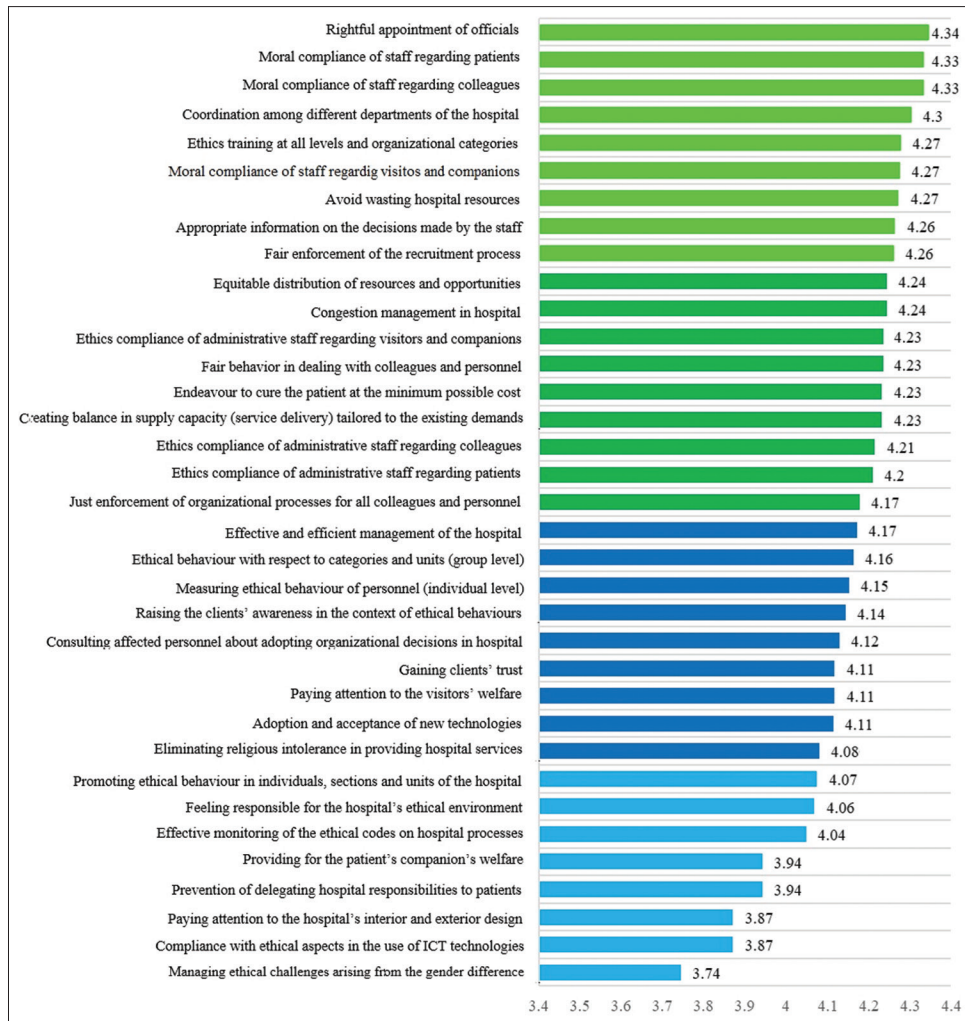


Figure 2: The importance of organizational ethics in Imam Khomeini Hospital Complex (IKHC)

supply capacity (service delivery) tailored to the existing demands; Effective and efficient management of the hospital; and Ethics training at all levels and organizational is used to test the average of a community to judge its functional status. What are the priorities for improving organizational ethics components in Imam Khomeini Hospital Complex? The vertical axis represents the ultimate weight (importance) of the organizational ethics model in the hospital [based on the results of Figures 2 and 3]. The cut point was also obtained from the mean of all the points in the performance dimension (value of 2.59) as well as the importance dimension (value of 4.15). Based on Figure 4, the organizational ethics model can be analyzed and organized as follows: The first quadrant is a critical area (priority and focus area, red points). The first priority pertains to the first quadrant, i.e., critical measures, which are of high importance and low performance and are presented in red. The following indicators were identified in the hospital: [HYPERLINK "https://targoman.ir/d/fa/%D8%B9%D8%A7%D8%AF%D9%84%D8%A7%D9%86%D9%87/"](https://targoman.ir/d/fa/%D8%B9%D8%A7%D8%AF%D9%84%D8%A7%D9%86%D9%87/)Rightful appointment of officials; Fair enforcement

of the recruitment process; Congestion management in hospital; Just enforcement of organizational processes for all colleagues and personnel; Equitable distribution of resources and opportunities; Fair behavior in dealing with colleagues and personnel; Creating balance in supply capacity (service delivery) tailored to the existing demands; Effective and efficient management of the hospital; and Ethics training at all levels and organizational categories (from top executives to the lowest organizational ranks).

The second area (green points) is the continuation of the good state and current strategy. The second priority pertains to the second quadrant, which has high importance and high performance and is presented in green. The following indicators were identified in the hospital: Moral compliance of staff regarding patients; Moral compliance of staff regarding visitors and companions; Endeavor to cure the patient at the minimum possible cost; Moral compliance of staff regarding colleagues; Ethics compliance of administrative staff regarding patients; Ethics compliance of administrative staff regarding visitors and companions;

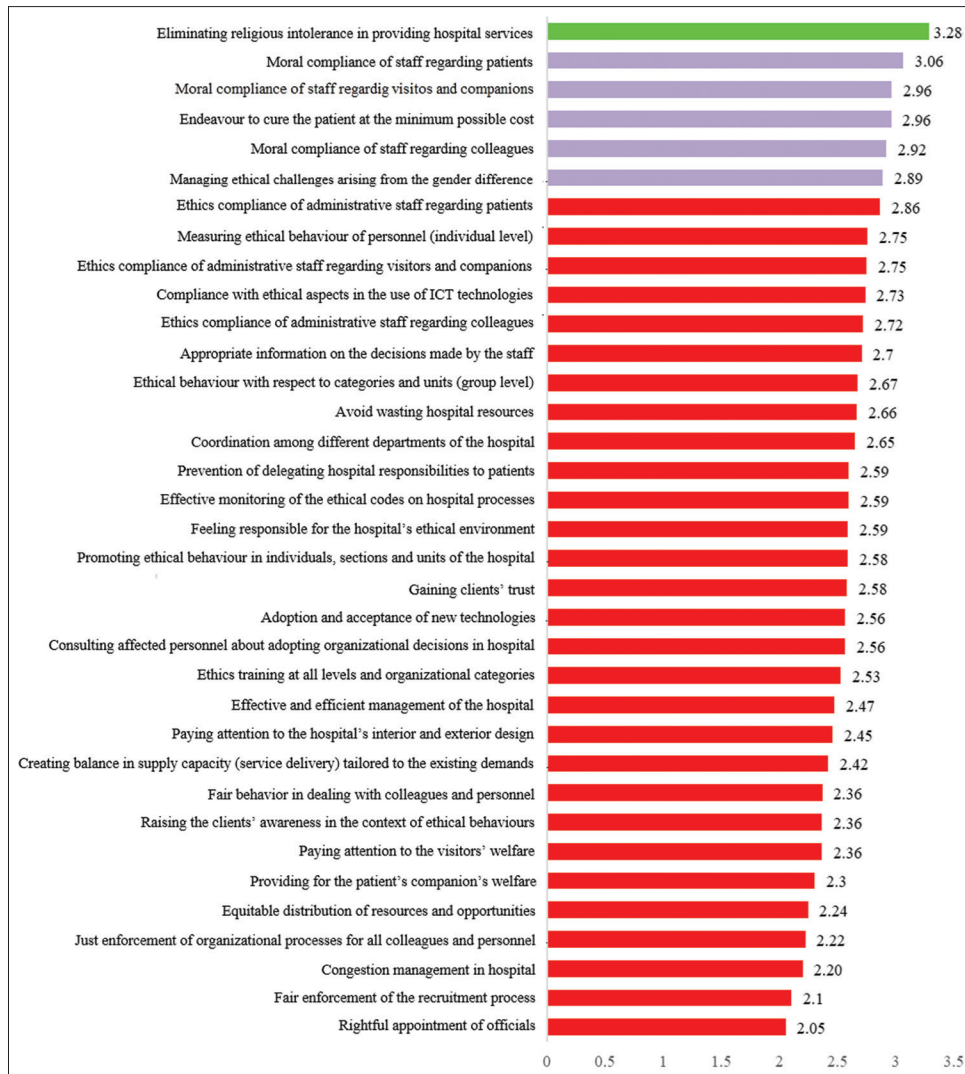


Figure 3: The performance of organizational ethics in Imam Khomeini Hospital Complex (IKHC)

Ethics compliance of administrative staff regarding colleagues; Appropriate information on the decisions made by the staff; Ethical behavior with respect to categories and units (group level); Avoid wasting hospital resources; Coordination among different departments of the hospital.

The third area (orange points) is the indifference area. Ignored in the first and second regions, this quadrant is not a priority and staff is rather indifferent to it. The third priority pertains to the third quadrant, which is of low importance and low performance, and is presented in orange. The following indicators were identified in the hospital: Providing for the patient's companion's welfare; Raising the clients' awareness in the context of ethical behaviors; Paying attention to the visitors' welfare; Paying attention to the hospital's interior and exterior design; Consulting affected personnel about adopting organizational decisions in hospital; Adoption and acceptance of new technologies; Gaining clients' trust; Promoting ethical behavior in individuals, sections, and units of the hospital

after measurements; Feeling responsible for the hospital's ethical environment.

The fourth quadrant (blue points) refers to the resource loss area (to account in the first and second area of attention, is considered to be too much attention to the area of waste resources). The fourth priority corresponds to the fourth quadrant, which has lower importance and higher relative performance and is presented in blue. The following indicators were identified in the hospital: Eliminating religious intolerance in providing hospital services; Managing ethical challenges arising from the gender difference between the patient and the doctor; Measuring ethical behavior of personnel (individual level); Compliance with ethical aspects in the use of ICT technologies; Effective monitoring of the ethical codes on hospital processes; Prevention of delegating hospital responsibilities to patients.

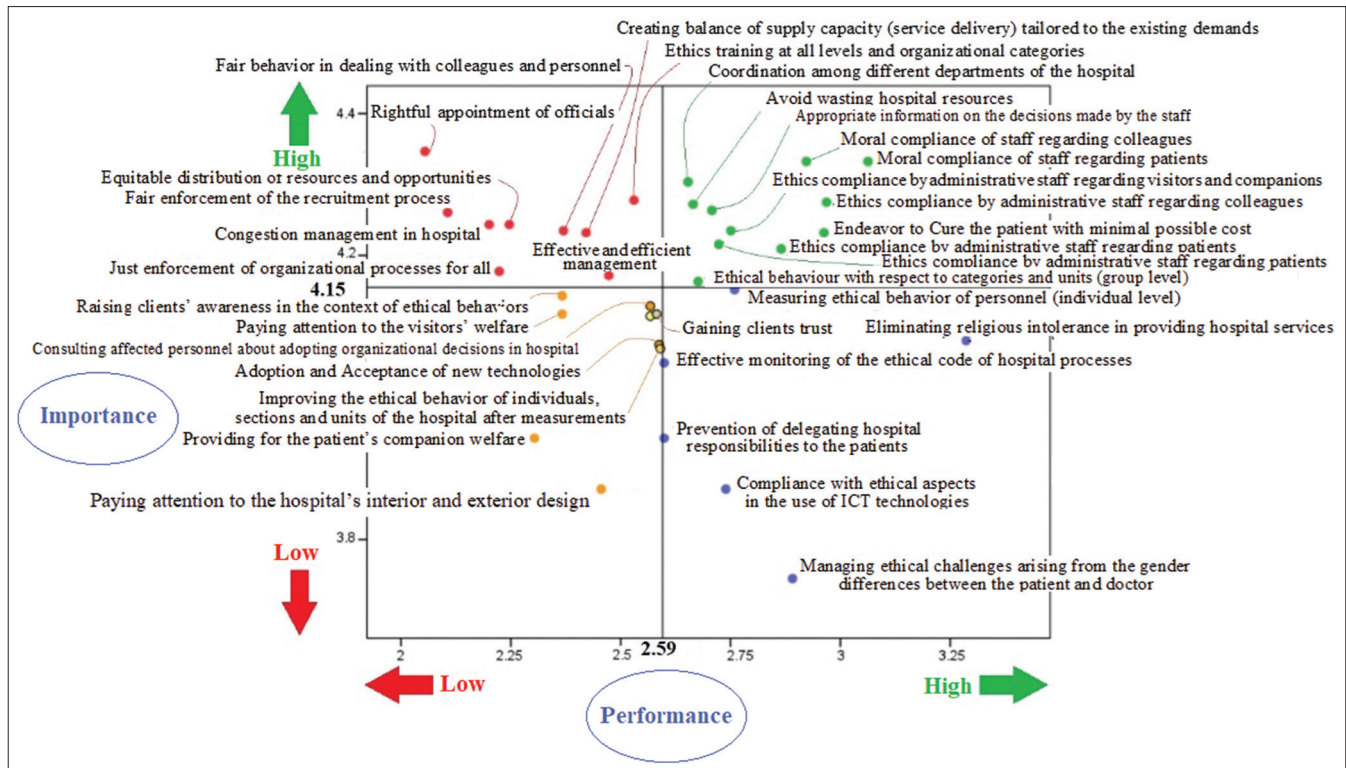


Figure 4: The importance-performance matrix of the organizational ethics in Imam Khomeini Hospital Complex (IKHC)

Discussion

In this study, the main question was, “What are the dimensions and indices of the organizational ethics of IKHC?” Other questions were related to the importance and performance of the identified organizational ethics model in IKHC, hence determining the priorities in improving the components of organizational ethics. In fact, the research aims to provide a framework for measuring organizational ethics and offer practical solutions to improve the ethics status according to the importance and performance of the identified indicators. For this purpose, interviews were conducted with experts to identify organizational ethics indicators. Next, thematic analysis (grounded theory approach) was used to analyze the interviews. At the end of the thematic analysis, the organizational ethics model was explained. According to the findings, the main components of the concept of “organizational ethics” in IKHC included “ethics drivers in the hospital” and “personal ethics.” In the category of “ethics drivers in the hospital,” 40 concepts in nine subcategories were obtained as follows: The 1st subcategory of “collaborative decision making in hospital” was coded with three concepts of “maintaining the principle of in-hospital consultation,” “coordination of hospital wards” and “informing the hospital staff about confirmed decisions.” The 2nd subcategory of “organizing ethics in hospital” was encoded with six concepts of “prevention of chaos and overcrowding in hospital,” “keeping the gender ratio of staff,” “establishing a balance between supply and demand in hospital,” “acquiring

the latest technology in hospital,” “providing for the patient’s companion’s welfare,” and “applying the art of management/administrative intelligence in managing hospital.” The 3rd subcategory of “hospital culture improvement” was encoded with five concepts of “avoiding patient’s companion exploitation,” “paying attention to the patient’s companion’s welfare,” “paying attention to the nature of hospital esthetics,” “creating a trusting atmosphere in hospital,” and “maintaining patient confidentiality.” The 4th subcategory of “social responsibility of the hospital staff” was encoded with three concepts of “environmental responsibility in hospital,” “economic sympathy in hospital” and “national patriotism.” The 5th subcategory of “attention to education in hospital” was coded with three concepts of “inductive approach to ethics education in hospital,” “increasing patient awareness,” and “holding ethics workshops in hospital.” The 6th subcategory of “end evaluation of hospital staff” was coded with five concepts: “monitoring the workflow of hospital wards,” “a healthy monitoring system of hospital procedures,” “maintaining justice and fairness in hospital,” “avoiding competitive payments to doctors,” and “creating a healthy competitive atmosphere among doctors.” The 7th subcategory of “ethical application of technologies in hospital” was coded with seven concepts of “maintaining patient confidentiality and privacy,” “accuracy in importing patient information,” “facilitating medical procedures,” “using computer technologies to save paper,” “promoting use of emerging technologies in hospital,” “automated reception

in hospital” and “ease of communication with hospital departments.” The 8th subcategory of “hospital technologies management” was encoded with five concepts of “feedback on performance ethics in hospital,” “innovative planning in hospital,” “improving hospital performance,” “electronic coordination in hospital,” and “applying process-based approach in hospital.” The 9th subcategory of “attention to meritocracy in hospital” was coded with three concepts of “competency-based management in hospital,” “competency of hospital directors” and “competent staff selection in hospital.”

In this model, the “personal ethics” category is derived from 33 concepts in two subcategories presented below in Tables 1 and 2. In the second step, which includes the quantitative part of the research, evaluation of the importance and performance of organizational ethics indicators in this hospital was carried out. The findings of this part were considered as input for importance-performance analysis. The importance-performance matrix is a soft operational research method and an excellent technique for prioritizing solutions in dealing with organizational problems. The importance-performance analysis findings categorized organizational ethics indicators into four main priorities. As shown in Figure 4, the first area contains nine indicators of organizational ethics that were estimated to be of high importance and relatively low performance. As Martilla and James highlighted in the 1970s,^[29] the first area is the critical area and its indicators need immediate attention and fundamental corrective actions. The 11 indicators in the second area enjoy a relatively good status and performance but need to be strengthened to maintain and improve organizational ethics. The nine indicators of the third area were of low importance and poor performance and were therefore placed in the third priority, but can be brought to the attention of hospital authorities to improve ethics. Finally, although the six indicators identified in the fourth area have high performance and low importance, it is still necessary to pay attention to them as the fourth priority.

With regard to the first area, which is the first priority for improvement, the following practical suggestions are presented, which are also supported by theoretical literature:

While the regulations need to be reviewed and the processes be made clear, it is essential that appointments be given based on competencies and more measurable indicators. The recruitment process has to be transparent and applicants should be assessed based on their capabilities and suitability of their profession to the desired position. Therefore, the process must be clearly defined for all applicants to promote transparency with regard to their rejection or acceptance. It should be added that these factors have been emphasized as important ethical points in a published book.^[30]

Adopting effective methods of reception, scheduling, e-notification, etc., can help reduce congestion and

overcrowding in hospitals. Internet of things (IoT) can also be used to create different mechanisms of congestion management for the remote care monitoring system.^[31] Organizational processes should constantly be improved and outsourced as far as possible so that they can be operated from process management systems. It is essential that procedures be properly explained to all colleagues and personnel and to ensure the deployment of improved monitoring methods. Paying attention to these matters is of great importance, especially in the digital era.^[32] Measures should be taken to clarify the distribution status of resources and opportunities and remove the barriers to equitable access and use of executive procedures. According to Smith, attention to this issue has been particularly important during and after the coronavirus pandemic.^[33] It is necessary to train all hospital employees, including managers and staff, in adherence to justice and fairness in dealing with coworkers and personnel. Another effective measure is to utilize supply and demand management methods such as integrated or advanced planning to balance supply capacity (service delivery) according to existing demands. The organization’s priority issues should be identified, formulated, and implemented through hard and soft operation methods to solve problems and improve hospital productivity. For this purpose, various types of strategic planning methods, optimization of materials, information and financial flows, or multiobjective decision-making methods can be employed. Continuous training in all categories and practical ways of implementation of ethics is necessary at all organizational levels (from top executives to the lowest organizational ranks).

Even though this research is beneficial in the development of the organizational ethics model in IKHC in some respects, it has certain limitations. These limitations are in part due to the research methodology, and the fact that the research setting was limited to the IKHC. In addition, the cultural characteristics of Tehran and the diversity of patients in this city may affect the role of the interferer, which has not been investigated in this study and therefore the results are generalizable within the scope of the research domain. Also, this study has been done only in public hospitals, and the ethical model of private hospitals may affect the nature of the organization’s ethical model, which has not been covered in this study. This has been a one-time research, so the variables have been studied in one period of time, but the leadership styles of managers over different periods and upstream policies can affect the ethical model of hospitals, which can be the context of future studies. To collect data, seminars, workshops, and conferences could be used, but only a number of these items were included in the present study due to the limited amount of time. With regard to data, a mass of literature and Internet sources can be found on the philosophy of ethics that the researcher examined only to a reasonable extent during the

study period. For example, there was not enough time to investigate all research-based methods related to the theory of trust and interview and use all experts in this area. It would have been preferable to interview more people with deep knowledge of philosophy, hospital, medicine, and ethics, but unfortunately not many such people are practicing. The interviewer was able to conduct interviews with people who had some knowledge of philosophy and were also familiar with the hospital environment and ethics, and had several years of work experience in the field. It is difficult to find people who have reached the level of higher hospital management by moving up in the job hierarchy and are still able and willing to make time for interviews. To achieve accurate results in thematic analysis, there is a need for highly motivated people in the field, as those who lack motivation are less likely to take the time to interview. Many graduates who have good powers of analysis avoid discussions and interviews, but because of the nature of this research and the ethical concerns of many individuals, there has been relatively good cooperation in other scientific research topics. Also, the expansion of E-Health applications has led to challenging ethical issues.^[34] For example, new technologies such as the Internet of Things (As an emerging technology in the Industry 4.0)^[35,36] can improve organizational ethics with their applications in healthcare^[37,38] This issue can be scrutinized in future research. The cooperation in labor-employer relations leads to the improvement of labor market efficiency^[39]; So, the impact of hospital staff ethics on labor relations can be addressed in future studies.

Conclusion

Organizational ethics measurement is a constant concern of many managers and researchers. Considering the special nature of hospitals and the growing attention in the society to medical ethics in recent years, it is important to have the appropriate model for hospitals.^[40] Based on the identified indices and the findings of importance-performance analysis, it is recommended to continually assess the status of ethics in hospitals and offer strategies for improving organizational ethics. With the right prioritization, the conditions for ethical reforms in hospitals will be improved. As an organization achieves its objectives, respect for ethics will increase, and so will confidence in the institution and commitment to work. Similarly, according to the ethics drivers in the organization, collective decision-making, and collaboration will allow employees to make the right decisions. Observance of ethics encourages attention to the rules and regulations in the organization. On the other hand, according to the term “personal ethics,” people who are selected for a position must be qualified to take on that job in terms of knowledge, skills, abilities, and experience. At the same time, “professional ethics” enhances a sense of justice in the organization. In relation to patients, ethics promotes informed consent with regard to treatment

decisions, because if the patient has to consent to a certain procedure or choose a particular treatment with sufficient prior knowledge of the doctor and the treatment staff, there will be a very different sense of satisfaction. Therefore, according to a selection of subindicators mentioned above, organizational ethics is a basic and essential concept for any institution to achieve its mission, vision, and goals.

Acknowledgments

The authors would like to thank the women for their willingness to participate to this study (Grant No. 960403036835 on November 24, 2018).

Financial support and sponsorship

Imam Khomeini Hospital complex

Conflicts of interest

Nothing to declare.

References

- Manning P, Baker N, Stokes P. The ethical challenge of Big Tech’s “disruptive philanthropy”. *Int Stud Manag Org* 2020; 50: 271-90. doi: 10.1080/00208825.2020.1811522.
- Schofield G, Dittborn M, Selman LE, Huxtable R. Defining ethical challenge (s) in healthcare research: A rapid review. *BMC Med Ethics* 2021;22:1-7. doi: 10.1186/s12910-021-00700-9.
- Houdek P. Fraud and understanding the moral mind: Need for implementation of organizational characteristics into behavioral ethics. *Sci Eng Ethics* 2020;26:691-707.
- McCrudden PJ. The tension between “margin and mission” as an ethical issue in healthcare. In *Thorny Issues in Clinical Ethics Consultation*. Cham: Springer; 2022. p. 253-8.
- Roszkowska P, Melé D. Organizational factors in the individual ethical behaviour. The notion of the “organizational moral structure”. *Hum Manag J* 2021;6:187-209. doi: 10.1007/s41463-020-00080-z.
- Nica E. Moral leadership in health care organizations. *Am J Med Res* 2015;2:118-23.
- Faden RR, Kass NE, Goodman SN, Pronovost P, Tunis S, Beauchamp TL. An ethics framework for a learning health care system: A departure from traditional research ethics and clinical ethics. *Hastings Center Report* 2013;43:S16-27.
- Asare P, Ansah EW, Sambah F. Ethics in healthcare: Knowledge, attitude and practices of nurses in the Cape Coast Metropolis of Ghana. *PloS One* 2022;17:e0263557.
- Bingöl S, İnce S. Factors influencing violence at emergency departments: Patients’ relatives’ perspectives. *Int Emerg Nurs* 2021;54:100942. doi: 10.1016/j.ienj. 2020.100942.
- Pandi-Perumal SR, Akhter S, Zizi F, Jean-Louis G, Ramasubramanian C, Edward Freeman R, Narasimhan M. Project stakeholder management in the clinical research environment: How to do it right. *Front Psychiatry*. 2015;6:71. doi: 10.3389/fpsy.2015.00071.
- Ghasemi R. Designing and explaining a model for sustainability in service supply chain in Hospitals based on Creating Shared Value approach. 2016, Ph.D thesis in Production and Operations Management, Faculty of Management, University of Tehran.
- Quitmann C, Sauerborn R, Danquah I, Herrmann A. ‘Climate change mitigation is a hot topic, but not when it comes to hospitals’: A qualitative study on hospital stakeholders’ perception

- and sense of responsibility for greenhouse gas emissions. *J Med Ethics* 2022. doi: 10.1136/medethics-2021-107971.
13. McLeod MS, Payne GT, Evert RE. Organizational ethics research: A systematic review of methods and analytical techniques. *J Bus Ethics* 2016;134:429-43.
 14. Nielsen RP, Massa FG. Reintegrating ethics and institutional theories. *J Bus Ethics* 2013;115:135-47.
 15. Blackler L, Scharf AE, Chin M, Voigt LP. Is there a role for ethics in addressing healthcare incivility? *Nurs Ethics* 2022;09697330221105630.
 16. Moskop JC. *Ethics and health care: An introduction*. Cambridge University Press; Cambridge, United Kingdom 2016.
 17. Remišová A, Lašáková A, Kirchmayer Z. Influence of formal ethics program components on managerial ethical behavior. *J Bus Ethics* 2019;160:151-66.
 18. Smith DM. *Moral Geographies*. Edinburgh University Press; 2022.
 19. Stringer Smith C. History of Racism in Healthcare: From Medical Mistrust to Black African-American Dentists as Moral Exemplar and Organizational Ethics—a Bioethical Synergy Awaits. *The American Journal of Bioethics*. 2022 Jul 29;1-3.
 20. Morse JM. *Mixed method design: Principles and procedures*. Routledge; Oxfordshire, England, UK. 2016.
 21. Clarke V, Braun V, Hayfield N. Thematic analysis. *Qualitative psychology: A practical guide to research methods*. 2015;222:248.
 22. Terry G, Hayfield N, Clarke V, Braun V. Thematic analysis. *The SAGE handbook of qualitative research in psychology*, Editors: Willig C, & Rogers WS. Vol.2. 2017: 17-37. doi: 10.4135/9781526405555.
 23. Mahbanooei B, Gholipour A, Abooyee AM. A competency model for general health managers (Case: Iran medical of health and education). *Iran J Manag Stud* 2016;9:217-241. doi: 10.22059/IJMS.2016.56950.
 24. Pirmoon P, Hamidi N, Mohammadi N, Doroudi H. Analysis of the importance-performance of creativity drivers in the health sector employees. *J Health Admin* 2021;23:30-9.
 25. Ramezani M, Azar A, Khazaei M. Gap analysis through a hybrid method: Critical systems heuristics and best worst method. In *The International Workshop on Best-Worst Method*. Cham: Springer; 2021. p. 272-86.
 26. Mahbanooei, B. Design model of organizational ethics based on virtue in hospitals. Ph.D thesis in Organizational Behavior Management, Farabi Campus, Faculty of Management and Accounting, University of Tehran; 2018.
 27. Roulston K. Considering quality in qualitative interviewing. *Qual Res* 2010;10:199-228.
 28. Yusoff MSB. ABC of content validation and content validity index calculation. *Resource* 2019;11:49-54.
 29. Ghasemi R, Alidoosti A, Hosnavi R, Norouzian Reykandeh J. Identifying and Prioritizing Humanitarian Supply Chain Practices to Supply Food before an Earthquake. *Indus Manag J* 2018 Mar 21;10:1-6. doi: 10.22059/IMJ.2018.234645.1007246.
 30. Hossain S. *Pharmaceutical Industry*. *Ent Manag Bus Cases* 2021; 17:23.
 31. Iqbal N, Ahmad S, Kim DH. Health monitoring system for elderly patients using intelligent task mapping mechanism in closed loop healthcare environment. *Symmetry* 2021;13:357.
 32. Szalados JE. *The Medical-Legal Aspects of Acute Care Medicine: A Resource for Clinicians, Administrators, and Risk Managers*, Editor: Szalados JE. Springer, New Yourk, USA. 2021: 1-18.
 33. Smith C. The structural vulnerability of healthcare workers during COVID-19: Observations on the social context of risk and the equitable distribution of resources. *Soc Sci Med* 2020;258:113119.
 34. Mahbanooei B, Poorezzat AA, Zarei Matin H, Yazdani HR. E-Health Cods of Medical Ethics based on Virtue Approach in Hospitals. *J Ethics Sci Technol* 2019;14:29-36. doi: 10.22037/mej.v13i44.21321.
 35. Zarei M, Mohammadian A, Ghasemi R. Internet of things in industries: A survey for sustainable development. *Int J Innov Sustain Dev* 2016;10:419-42.
 36. Zadtootaghaj P, Mohammadian A, Mahbanooei B, Ghasemi R. Internet of Things: A Survey for the Individuals' E-Health Applications. *J Inf Technol Manag* 2019; 11:102-29. doi: 10.22059/JITM.2019.288695.2398.
 37. Mohammadzadeh AK, Ghafoori S, Mohammadian A, Mohammadkazemi R, Mahbanooei B, Ghasemi R. A Fuzzy Analytic Network Process (FANP) approach for prioritizing internet of things challenges in Iran. *Technol Soc* 2018;53:124-34. doi: 10.1016/j.techsoc.2018.01.007.
 38. Nasrollahi M, Ghadikolaei AS, Ghasemi R, Sheykhizadeh M, Abdi M. Identification and prioritization of connected vehicle technologies for sustainable development in Iran. *Technol Soc* 2022;68:101829. doi: 10.1016/j.techsoc. 2021.101829.
 39. Mohaghar A, Mahbanooei B, Behnam M, Khavari Z. Analyzing OECD's Labor Market Efficiency in 2018. *Economic and Social Development: Book of Proceedings*. 34th International Scientific Conference on Economic and Social Development, Moscow, Russia. 2018 Oct 18:341-53. Retrieved from: <https://www.webofscience.com/wos/woscc/full-record/WOS:000464906000035>.
 40. Poorezzat, AA, Zareimatin H, Yazdani HR, Mahbanooei, B. Designing Virtue-Based Organizational Ethics model for Tehran University of Medical Sciences Hospitals. *Q J Med Ethics* 2019; 13: 1-13. doi: 10.22037/mej.v13i44.21321.