

## Evaluation and Prioritization of Management and Leadership Competencies in Managers and Directors of Hospitals in Macro-Region 3 of Iran


Bahman Haghi<sup>1</sup> , Khlil Momeni<sup>2</sup>  , Jamil Sadeghi Far<sup>2</sup> , Hojatolah. Gharaee<sup>3</sup> , Ayoub Rashidi<sup>4</sup> 

<sup>1</sup> Student of Health Services Management, Department of Health Management and Economics, School of Health, Ilam University of Medical Sciences, Ilam, Iran

<sup>2</sup> Department of Health Management and Economics, School of Health, Ilam University of Medical Sciences, Ilam, Iran

<sup>3</sup> Department of Health Management and Economics, School of Health, Hamadan University of Medical Sciences, Hamadan, Iran

<sup>4</sup> Public Health Staff, Infectious Diseases Control Unit, Ilam University of Medical Sciences, Ilam, Iran

Article Info	ABSTRACT
<b>Article type:</b> Original article	<b>Introduction:</b> Leadership or managerial competencies refer to a set of skills, characteristics, and individual behaviors of leaders and senior executives in an organization. Given the importance of accurately identifying and determining the various dimensions of competencies in hospital directors and managers, the present study was conducted to evaluate and prioritize leadership and managerial competencies among directors and managers of hospitals in Macroregion 3 of the Iranian healthcare system.
<b>Article History:</b> Received: Apr. 02, 2025 Revised: May. 08, 2025 Accepted: Jun. 11, 2025 Published Online: June. 22, 2025	<b>Materials &amp; Methods:</b> This descriptive-analytical study was conducted across 60 hospitals in Iran's Health Macroregion 3. The research involved two phases: First, hospital directors' leadership and managerial competencies (leadership, relationship and communication management, social and professional responsibility, understanding the healthcare environment and services, and general business skills) were assessed using a standardized self-evaluation questionnaire. Second, based on the initial findings, training priorities were established according to identified competency gaps. Of the 180 selected participants, 140 completed the questionnaires. Data analysis was performed using SPSS software.
 <b>Correspondence to:</b> Khlil Momeni Department of Health Management and Economics, School of Health, Ilam University of Medical Sciences, Ilam, Iran	<b>Results:</b> General medicine had the highest frequency among the specialized fields of hospital directors in the study. Among the managerial competencies, the participating health administrators rated their highest abilities in "leadership competency" and "social and professional responsibility," while giving the lowest scores to their "business knowledge and skills."
<b>Email:</b> Khalilmomeni1365@gmail.com	According to the hospital directors and managers surveyed, in the field of leadership competencies, "relevance" had a higher average score compared to "capability level," with a significant difference between them. Based on the opinions of the health directors and managers, the highest learning priority was given to "leadership competency" development.
	<b>Conclusion:</b> Given the structural and systemic challenges, including the lack of a managerial evaluation framework, deficiencies in training content related to managerial competencies, and professional barriers in healthcare management, the proper selection and appointment of health managers requires structural reforms and long-term needs-based training programs.
	<b>Keywords:</b> Competency, Professionalism, Management and Leadership, Hospital

### ➤ How to cite this paper

Haghi B, Momeni K, Sadeghi Far J, Gharaee H, Rashidi A. Evaluation and Prioritization of Management and Leadership Competencies in Managers and Directors of Hospitals in Macro-Region 3 of Iran. *Journal of Health Sciences Perspective*. 2025; 1(3):13-23.

## Introduction

Healthcare organizations, including hospitals, are large-scale and complex institutions with advanced methods, intricate mechanisms, and diverse resources (5). Their success heavily depends on the implementation of effective and competency-based management styles (6). Over the past three decades, health systems—particularly hospitals—have increasingly sought to adopt new managerial approaches and enhance the effectiveness of both managers and staff. In the public sector, this shift reflects a transition toward a business-oriented perspective in hospital governance, aimed at expanding decision-making autonomy (3–5).

Managers, as the primary decision-makers, play a critical and visible role in addressing organizational and supra-organizational challenges. Their decisions significantly impact the coordination, efficiency, and effectiveness of organizational operations (9). In 2007, the World Health Organization emphasized the need for all countries to strengthen their health sector's management and leadership capacities through four key components: ensuring an adequate number of managers, ensuring competent and qualified leadership, establishing robust management support systems, and creating efficient working environments (11). Therefore, competent managers are essential across various units of healthcare delivery (12).

Leadership or managerial competencies refer to a set of skills, attributes, and individual behaviors demonstrated by senior leaders and managers within an organization. These competencies provide a framework for identifying both current and future needs, ultimately enhancing productivity and reducing costs (14). In today's complex and ever-changing healthcare systems, managers must adopt leadership styles that align with these evolving demands. Competent leadership can significantly influence hospital performance and the quality of patient care (16).

In a 2022 study conducted by Rezaei Yazdeli and colleagues in Tehran Province, four overarching themes, ten organizing themes, and forty basic themes were identified, leading to the development of a managerial competency model impacting the performance of Social Security hospitals (11). Similarly, Watiwong and colleagues in Thailand proposed nine core competencies for primary healthcare managers. Most of these frameworks, however, originate from developed countries and are tailored to specific healthcare systems (12,13).

Given the absence of a context-specific competency model for hospital managers and directors in Iran, the present study aims to evaluate and prioritize management and leadership competencies among hospital managers and directors in the third regional medical cluster.

## Materials and methods

This descriptive-analytical study was conducted during the second half of 2023 and into 2024 in educational and therapeutic hospitals within Iran's third regional medical cluster.

The study population included senior hospital managers such as hospital presidents, administrators, and metrons working in hospitals affiliated with the universities of medical sciences in Ilam, Kermanshah, Hamedan, and Kurdistan. The sample size was determined based on the total number of senior managers across the 60 teaching and therapeutic hospitals in the region, resulting in a census sample of 180 participants. The sampling method was a census. Inclusion criteria were holding a senior management position in a hospital, while exclusion criteria included incomplete questionnaire responses or withdrawal from participation for any reason. Of the 180 selected participants, 140 completed the questionnaires.

For data collection, the researcher coordinated with the universities in the cluster and distributed the electronic questionnaire file through the treatment deputy of each university and to the hospital

managers. The questionnaires were completed and collected via virtual networks and online groups in which the senior managers were active members.

The primary data collection tool was a questionnaire derived from the international framework for health management competencies titled "Self-Assessment of Health Managers' Competencies," developed based on standards by the International Hospital Federation (IHF). The questionnaire consisted of two parts: demographic/background variables and managerial competency items.

The first section included demographic variables such as age, gender, education level, academic field, hospital size, number of staff, managerial experience, type of hospital (general or specialized teaching hospital), and participation in training courses. The second section contained 81 items across five domains: leadership, relationship and communication management, social and professional responsibility, understanding the healthcare environment and services, and general business skills. Participants responded to each item using a 5-point Likert scale (1–5), evaluating both the level of competency and the relevance of the competency to their current job.

To determine training priorities, based on the results of the first phase, a second questionnaire on educational and learning priorities was completed by the hospital managers. The higher the numerical value, the higher the priority assigned to that particular competency.

Data were analyzed using descriptive statistics such as frequency, percentage, and cumulative percentage. Inferential analysis was conducted using regression analysis. All statistical analyses were performed using SPSS software, version 22.

## Findings

According to the findings of the study, 31.7% of the participants were female and 68.3% were male. The majority of participants were between 30 and 40 years old (36.7%) and most were married (88.3%). In terms of education, the largest proportion held a master's degree (38.3%). Approximately 80% of the respondents had between 1 and 10 years of managerial experience, while most (52.5%) reported between 11 and 20 years of total work experience. Additionally, the majority of participants held the position of hospital administrator (42%) (Table 1).

**Table 1.** Demographic Characteristics of Study Participants

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	82	68.3%
	Female	38	31.7%
Age	30–40 years	44	36.7%
	41–50 years	64	53.3%
	51–60 years	12	10.0%
Marital Status	Single	14	11.7%
	Married	106	88.3%
Educational Level	Bachelor's Degree	34	28.3%
	Master's Degree	46	38.3%
	Professional Doctorate	13	10.8%
	PhD	27	22.5%
Management Experience	1–10 years	97	80.8%
	11–20 years	18	15.0%
	More than 20 years	5	4.2%
Work Experience	1–10 years	41	34.2%
	11–20 years	63	52.5%
	More than 20 years	16	13.3%
Type of Hospital	Teaching	54	45.0%

	Non-teaching	66	55.0%
Current Organizational Role	Hospital President	28	23.3%
	Hospital Administrator	50	41.7%
	Metron	42	35.0%
Total		120	100%

Among those serving as hospital presidents, the majority held a degree in general medicine; among hospital administrators, the most common field of study was management-related disciplines; and among metrons, the highest frequency was observed in the field of nursing (Table 2).

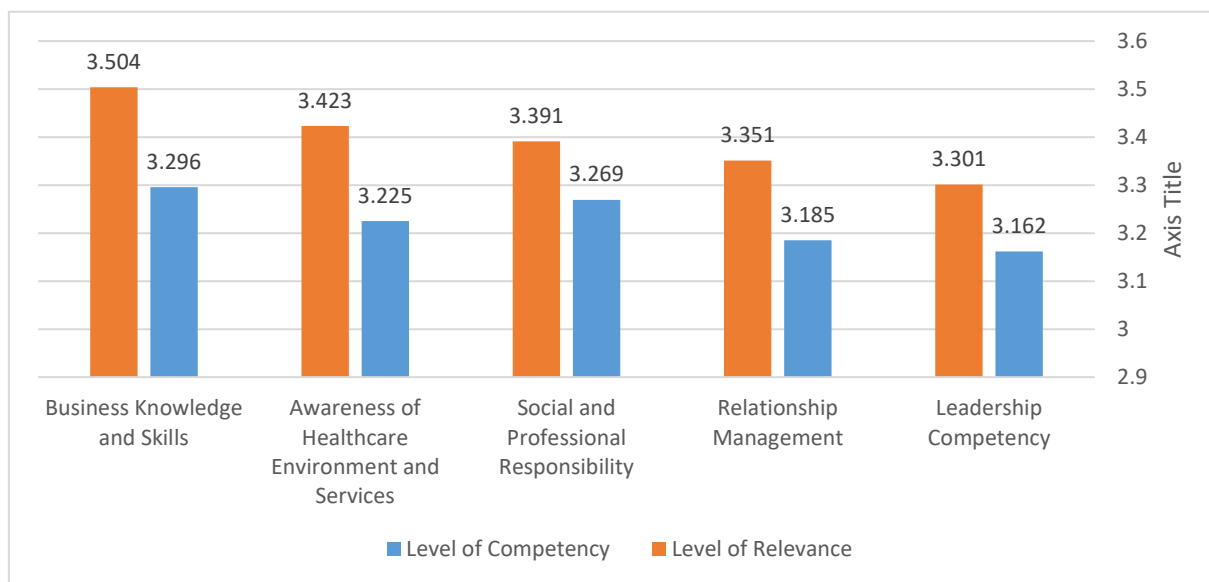
**Table 2.** Distribution of Current Organizational Position by Academic Field of Study.

Organizational Position	Field of Study	Frequency (n)
Hospital President	General Medicine	11
	PhD in Health Education	2
	Specialist in General Surgery	1
	Health Education	1
	Orthopedic Specialist	1
	Emergency Medicine	1
	Pathology	2
	Internal Medicine	2
	Health Care Management	1
	Anesthesia Technician (BSc)	1
	Pediatrics	2
	Infectious Diseases	1
	Operating Room Technician	1
	Anesthesia Technician (BSc)	1
Hospital Administrator	Laboratory Sciences	3
	Nutrition Sciences	2
	Business Management&Health Care Management.	15
	Physiotherapy	1
	Psychology	2
	Health Economics	3
	Nursing	8
	Biomedical Engineering	1
	Operating Room Technician	3
	Environmental Health	3
	Anesthesia	1
	Health Education	2
	Emergency Medical Services	1
	Public Health	2
	Anesthesiology	1
Metron	General Medicine	2
	Nursing	35
	Medical Genetics	1
	Operating Room Technician	2
	Health Care Management	1
	Anesthesiology	2
Total	Emergency Medical Services	1
		120

### Perceived Competency Levels of Health Managers Across the Five Core Competency Domains

As illustrated in the following chart, among the five core competency domains, the participating hospital

presidents and managers rated their highest perceived competency in “Leadership Competency” with a mean score of 3.269, while the lowest perceived competency was reported in “Business Knowledge and Skills” with a mean score of 3.162 (Chart 1).

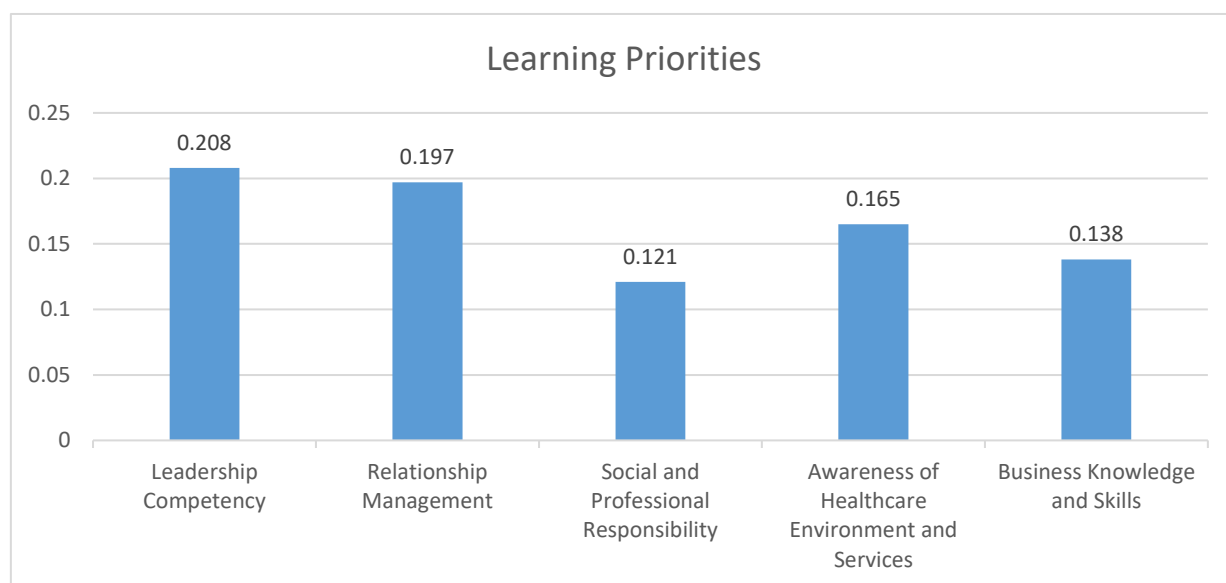


**Chart 1.** Average Competencies of Health Managers in Two Dimensions: Competency Level and Relevance.

### Learning Priorities of the Five Core Competencies of Health Managers from the Perspective of Hospital Managers and Heads.

As shown in the chart below, the surveyed hospital managers and health administrators have assigned the

highest learning priority to "Leadership Competency" with a mean score of 0.208, while the lowest learning priority was given to "Social and Professional Responsibility" with a mean score of 0.121 (Chart 2).



**Chart 2.** Learning Priorities of the Five Core Competencies of Health Managers from the Perspective of Hospital Managers and Heads.

### Factors Affecting Professionalism in Management Among Hospital Managers and Heads

The results of the multivariate regression analysis indicate that among the various factors examined, age, managerial experience, and organizational position have a significant relationship with

management professionalism in hospital managers and heads. Specifically, as age, managerial experience, and organizational position increase, the level of management professionalism among the surveyed hospital managers and heads also increases (Table 3).

**Table 3.** Here is the English translation and presentation of the regression table with proper scientific terminology.

Variables	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Age	-2.671	1.111	-0.312	-2.403	0.018
Gender	-1.031	1.083	-0.089	-0.952	0.343
Educational Degree	-0.561	0.637	-0.115	-0.882	0.380
Managerial Experience	2.240	1.259	0.213	1.979	0.048
Work Experience	1.636	0.987	0.197	1.658	0.100
Hospital Type	0.754	1.028	0.069	0.734	0.465
Province of Service	0.068	0.478	0.014	0.143	0.887
Participation in Training	-0.141	1.060	-0.013	-0.133	0.895
Current Organizational Position	-2.009	0.973	-0.281	-2.065	0.041

### Discussion

Based on the obtained results, among the various factors examined, age, managerial experience, and organizational position have a significant relationship with management professionalism in hospital managers and heads. Specifically, as age, managerial experience, and organizational position increase, the level of management professionalism among the studied hospital managers and heads also increases.

It appears that managerial skills improve in individuals with greater age, more managerial experience, and higher organizational positions due to their accumulated experience in management and leadership. Managerial experience can help managers develop a better understanding of organizational processes, needs, and expectations, thereby enabling them to make more informed and effective decisions.

### Assessment of Management and Leadership Competencies Among Hospital Managers and Heads

Based on the study findings, leadership competencies and their related dimensions and indicators exhibit the strongest association with the managers' field of work. However, the managers obtained relatively low scores in this area, indicating a clear need for development of these skills.

Mirzaei et al. highlighted that structural challenges within universities are among the significant management challenges faced by hospitals (14). Similarly, Gavkhani et al. reported that management and structural problems are critical challenges not only in public hospitals but also in private hospitals (15). Furthermore, Ziyari et al. identified managerial instability as a key challenge in hospital management (16).

According to the perspectives of hospital managers and heads surveyed, competencies in relationship and communication management, their relevance to their responsibilities, and the managers' proficiency in this domain all had nearly identical average scores, with no statistically significant differences observed.



In a study by Stickler et al. conducted in the southwestern United States, knowledge, attitudes, performance, and barriers to evidence-based nursing education were evaluated. The findings showed that nursing faculty ranked attitude highest, followed by knowledge/skills, and lastly performance (17).

Similarly, regarding social and professional responsibility, the surveyed managers and heads indicated average scores that were nearly equal across relevance to their duties and their competence, without significant differences.

A study by Mohamed et al. in Egypt found that 76% of patients were unaware of the existence of the patient rights charter; however, they believed that physicians and nurses would respect their rights. Meanwhile, the awareness level of physicians regarding the patient rights charter in Egypt was reported at 50% (18).

Regarding awareness of the healthcare environment and services, as well as related competencies, hospital managers and heads reported nearly identical average scores, with no significant differences.

Similarly, in terms of business knowledge and skills, relevance to responsibilities and competency levels among the surveyed managers were comparable, showing no statistically significant difference.

Safdari et al. emphasized that integrated information systems must consistently cover all core information processing systems in a compatible and interoperable manner to ensure independent and combined access to information produced across various organizational processes such as budgeting, production, sales, marketing, and administration (19).

Among the assessed managerial competencies, hospital managers and heads assigned the highest scores to “leadership competency,” followed by “social and professional responsibility,” “relationship management,” “awareness of the healthcare environment and services,” and finally “business knowledge and skills,” respectively.

Given that leadership competency received the highest rating, it appears that leadership plays a vital role at senior management levels in any organization. This importance is particularly heightened in the healthcare sector, where managers must effectively lead multidisciplinary teams comprising medical staff, nurses, and other personnel toward shared goals. These goals may include improving service quality, enhancing patient satisfaction, and achieving better clinical outcomes.

Khadka et al., in their study of hospitals in Nepal, underscored the importance of communication and informational skills in hospital managers, identifying leadership and communication as the most critical competitive components among hospital managers (20).

Studies indicate that one of the key factors influencing social responsibility acceptance is senior management and organizational leadership. Kakabadse demonstrated this in a study conducted at a local hospital in France to assess understanding of social responsibility concepts and compare them with theoretical frameworks (21). Rohini also emphasized the important role of senior hospital management in fulfilling social responsibilities in five private hospitals in Bangalore, India (22).

Due to the highly team-oriented nature of healthcare, managers must establish effective relationships among diverse staff members and foster a climate of empathy and cooperation to enhance team performance.

Numerous studies by Masoudinia, Asgharzadeh et al., Yazdani et al., Saeedi et al., Jazini et al., Keshtkaran et al., Norliza et al., Harrington, Robbins, Allen, and Blackburn have identified factors such as verbal skills, feedback, delegation, personality traits, communication skills, active listening, motivation, work commitment, trust, empathy, collaboration, leadership, situational factors, and responsibility as influential elements in organizational communication (23–31).

Given the complex and specialized nature of the healthcare sector, managers must possess sufficient knowledge and awareness regarding health systems, healthcare policies, relevant laws and regulations, and health service delivery to make effective decisions. Considering the continuous changes in healthcare, managers need to update their knowledge regularly to stay informed about the latest advancements and challenges.

Business knowledge and skills ranked fifth, which aligns with the fact that the healthcare sector primarily aims to improve community health rather than profit generation. Therefore, managers tend to focus more on their core mission than on business skills.

According to study findings, compared to other managerial competencies, business skills in healthcare have a lower priority because healthcare managers emphasize leadership, ethical, and communication skills more strongly (32–35).

### ***Determining Educational Priorities for Hospital Managers and Heads***

Based on the obtained results, the highest learning priorities were assigned, in order, to leadership competency, relationship management, awareness of the healthcare environment and services, business knowledge and skills, and social and professional responsibility.

These findings indicate that hospital managers and heads focus primarily on the humanistic, ethical, and social aspects of their work. They consider effective leadership, accountability, establishing effective relationships, and thorough understanding of the healthcare environment as key factors for success in this field. This prioritization can serve as a valuable guide for developing training programs and empowerment initiatives targeted at healthcare managers.

### **Conclusion**

The present study demonstrates that effective communication and positive relationship-building skills in leadership are on average perceived as more critical than other leadership competencies in hospitals. Our competency assessments indicate that healthcare managers and directors primarily focus on the human, ethical and social aspects of their work. At the same time, business knowledge and skills are given lower priority, indicating these managers' greater focus on their core mission of improving community health. This prioritization can guide the development of training and empowerment programs for healthcare managers. By assessing managerial competencies and analyzing the current situation, this study recommends that health policymakers implement training programs focused on the following areas to empower healthcare managers.

- a) "Leadership empowerment" covering problem-solving analysis and critical thinking, strong public relations, negotiation principles and techniques, and change management.
- b) "Relationship management" covering team-based problem-solving and evidence-based decision making.
- c) "Understanding the health environment and health services" covering risk management, using statistical indicator analysis in decision-making, and promoting coalition building to expand participation.

### **Policy Summary**

Given the critical importance of precisely identifying and determining various competency dimensions in hospital managers, this study aims to assess managers' knowledge and skills while planning for their empowerment to enhance performance and improve healthcare service quality.

The research provides national health policymakers with short-term and long-term recommendations to address challenges and barriers in this field while promoting management professionalism.



**Long-term objectives:**

1. Developing clear regulations aligned with international standards and their proper implementation
2. Designing a merit-based selection mechanism for managers based on measurable competencies, expertise, and skills
3. Reducing physician dominance in health policy-making

**Short-term objectives**

1. Conducting relevant training courses to update managers' skills and managerial knowledge
2. Employing graduates specializing in hospital management fields
3. Continuous evaluation and monitoring of hospital managers to improve their performance

**Acknowledgements**

The researchers would like to express their gratitude to the directors and managers of hospitals in Macro-Region 3 of the Iranian healthcare system for their sincere cooperation in conducting this study.

**Ethics approval**

The present research project was reviewed and approved by Ilam University of Medical Sciences with the ethical approval code IR.MEDILAM.REC.1403.020.

**Financial support**

This article is part of a research project supported by Ilam University of Medical Sciences.

**Conflict of interest**

The authors report no conflict of interest in this study.

**Authors' contributions**

Data gathering, analyses and interpretation done by Haghi.B, Momeni.KH, Sadeghifar.J, GHaraee.H, drafting of the paper were done by All authors. Haghi.B and Rashidi.A reviewed the literature. All

authors read, revised, and approved the final manuscript.

## References

- Lindlbauer I, Winter V, Schreyögg J. Antecedents and consequences of corporatization: An empirical analysis of German public hospitals. *Journal of Public Administration Research and Theory*. 2016;26(2):309–26.
- Weberg D. Complexity leadership: A healthcare imperative. In: *Nursing forum*. 2012. p. 268–77.
- Nilsen P, Seing I, Ericsson C, Birken SA, Schildmeijer K. Characteristics of successful changes in health care organizations: an interview study with physicians, registered nurses and assistant nurses. *BMC Health Services Research*. 2020;20(1):147.
- Hospodková P, Berežná J, Barták M, Rogalewicz V, Severová L, Svoboda R. Change Management and Digital Innovations in Hospitals of Five European Countries. *Healthcare (Basel, Switzerland)*. 2021 Nov;9(11).
- Bastani P, Mohammadpour M, Bahmaei J, Ravangard R, Mehralian G. Hospital management by health services management graduates: the change paradigm in Iran. *Heliyon*. 2021 Nov;7(11):e08414.
- Gladson Nwokah N, Ahiauzu AI. Managerial competencies and marketing effectiveness in corporate organizations in Nigeria. *Journal of management development*. 2008;27(8):858–78.
- Asia WHOrganizationRO for SE. Anopheline species complexes in South and South-east Asia. Vol. 57. World Health Organization; 2007.
- Howard PF, Liang Z, Leggat S, Karimi L. Validation of a management competency assessment tool for health service managers. *Journal of health organization and management*. 2018;32(1):113–34.
- Kermani B, Darvish H, Sarlak MA, Kolivand P. Developing competence modeling of hospital managers. *The Neuroscience Journal of Shefaye Khatam*. 2017;7(4).
- Modi JN, Gupta P, Singh T. Competency-based medical education, entrustment and assessment. *Indian pediatrics*. 2015;52:413–20.
- Rezaei YM, Vedadi A, Rabiee MMR, Jamshidi AM. A model of managerial competencies affecting the performance of social security hospitals in Tehran, Iran. 2023;
- Brownell J. Leading on land and sea: Competencies and context. *International Journal of Hospitality Management*. 2008;27(2):137–50.
- Robotham D, Jubb R. Competences: measuring the unmeasurable. *Management development review*. 1996;9(5):25–9.
- Mirzaei S. Explanation of the executive challenges of clinical governance in military and university hospitals in Kerman city and offering suggestion-2014. MSc. Thesis, Kerman University of Medical Sciences; 2015.
- Gavkani F, Pourreza A, Hoseeini M, Feiz F. Perspective of private hospitals top managers on the problems. *Paeyesh Journal* 2010; 10 (1): 73-81.
- Ziari A, Abachizadeh K, Rassouli M, Heidarnia M, Mohseny M. Barriers Of Implementing Clinical Governance in Educational Hospitals Affiliated with Shahid Beheshti University Of Medical Sciences: A Qualitative Study. *Journal of Hospital* 2014; 13 (4): 93-103.
- Stichler JF, Fields W, Kim SC, Brown CE. Faculty knowledge, attitudes, and perceived barriers to teaching evidence-based nursing. *Journal of professional nursing : official journal of the American Association of Colleges of Nursing*. 2011;27(2):92–100.
- Mohammed ES, Seedhom AE, Ghazawy ER. Awareness and practice of patient rights from a patient perspective: an insight from Upper Egypt. *International Journal for Quality in Health Care*. 2018;30(2):145–51.
- Safdari Nahad M, Menarzadeh GR, Ezati M. The role of organizational factors on the implementation of the operational budget for the implementation of Article 219 of the Fifth Iran Development Plan. *Quarterly Journal of The Macro and Strategic Policies*. 2015;3(Vol 3-No 11):27–48.
- Khadka DK, Gurung M, Chaulagain N. Managerial competencies - A survey of hospital managers' working in Kathmandu valley, Nepal. *Journal of Hospital Administration* 2004; 3(1): 62-72.
- Kakabadse N, Rozuel C. Meaning of corporate social responsibility in a local French hospital: a case study. *Society and Business Review* 2006; 1(1): 77-96.
- Rohini R, Mahadevappa B. Social responsibility of hospitals: an Indian context. *Social Responsibility Journal* 2010; 6(2): 268-.
- Alan R W, Blackburn R S. *Managing Organizational Behavior*. Irwin Inc; 1989.
- Ruppel CP, Harrington S J. The Relationship of Communication, Ethical Work Climate, and Trust to Commitment and Innovation. *Journal of Business Ethics*. 2000; 25: 313–328.
- Norliza A, Zalizan M, Norzaini A, Saemah R. communication skills and work motivation amongst expert teachers. *Procedia Social and Behavioral Sciences* 2010; 7: 565–567.
- Keshtkaran A, Heydari A, Bastani, P. Communication skills of managers from the staff perspective In the headquarters of Shiraz University of Medical Sciences. *Journal of Faculty of Paramedicine, Tehran University of Medical Sciences* 2011; 5(4):41-48.
- Jazeyni A, Soltani A. The Effect of Managers Communication Skills with Employee's Job Satisfaction. *Quarterly Journal of Supervision and Inspection* 2014; 10(35): 13-42.
- Asghar Zadeh M, Kamali, Mehdi Zare Kahfari, Enayat. Relationship between Personality Characteristics of Managers and Their Job Performance in an Information Security Agency, *Journal of Security Studies* 2018; 17(62): 40- 62;
- Masoudnia M. Posture of authority in Organizational Management System and its Legal Effects (with Adaptation in Provincial Administrations of Payame Noor University), *Quarterly Journal of Public Organizations Management* 2018; 6(2): 109-116.
- Yazdani C, Soleimanpour M. The Relationship between Communication Skills and the Quality of Teachers of University Students from the Viewpoints of Medical

- Students, *Journal of North Medical Sciences, North of Khorasan* 2018; 9(4): 82-89.
31. Saeedi S, Niayi far J, Amiri M, Moghadas S. Study of factors affecting communication between employees and managers, management and industrial engineering. 2015; International Conference on Industrial Management and Engineering, Institute of Managers Idea .
  32. Naranjee N, Ngxongo TSP, Sibiya MN. Financial management roles of nurse managers in selected public hospitals in KwaZulu-Natal province, South Africa. *African journal of primary health care & family medicine*. 2019 Sep;11(1):e1-8.
  33. Naranjee N, Sibiya M, Thembelihle N. Development of a financial management competency framework for Nurse Managers in public health care organisations in the province of KwaZulu-Natal, South Africa. *International Journal of Africa Nursing Sciences*. 2019 Jun 1;11:100154.
  34. Bai Y, Gu C, Chen Q, Xiao J, Liu D, Tang S. The challenges that head nurses confront on financial management today: A qualitative study. *International journal of nursing sciences*. 2017 Apr;4(2):122-7.
  35. Paarima Y, Kwashie A, ansah ofei adelaide maria. Financial management skills of nurse managers in the Eastern Region of Ghana. *International Journal of Africa Nursing Sciences*. 2021 Jan 1.