

Assessment of the medical professionalism climate in the inpatient units of a teaching hospital affiliated with Iran University of Medical Sciences (2023-2024)

Alireza Khalili¹, Saeedeh Saeedi Tehrani², Mahshad Noroozi^{2*}, Soodabeh Hoveidamanesh³, Arezou Baradaran⁴, Akram Hashemi⁵

1. Golestan University of Medical Sciences, Gorgan, Iran.

2. Assistant Professor, Department of Medical Ethics, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.

3. Assistant Professor, Preventive Medicine and Public Health Research Center, Psychosocial Health Research Institute, Department of Community and Family Medicine, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.

4. Education Development Office, Rasool Akram Medical Complex, Iran University of Medical Sciences, Tehran, Iran.

5. Assistant Professor, Center for Educational Research in Medical Science, Department of Medical Education, School of Medicine, Iran University of Medical Sciences, Tehran, Iran; Department of Medical Ethics, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.

Abstract

Professionalism impacts professional identity, staff efficiency, and patient care quality. The purpose of this study was to evaluate the professional behavior and climate in a teaching hospital in Iran. A cross-sectional study was performed among faculty members, nursing staff, and specialized residents. The study used the validated 30-item "Medical Professionalism Climate in Clinical Settings" questionnaire developed by Asghari et al., containing two domains: adherence to professional behavior, and perceptions of the professional climate. Data were analyzed using SPSS version 26. The study population consisted of 271 individuals working at a teaching hospital, 44.3% male and 55.7% female, averaging 34.79 years in age.

The results showed there was a relationship between the total mean score, the professional behavior score, the professional climate score, and the participants' professional titles (P -value < 0.001), as well as the duration of their work experience in the department (P -value: 0.005, P -value: 0.039, P -value: 0.001, respectively). The faculty members achieved the best scores, followed by the residents, nurses, and nursing assistants. Analysis of the professional behavior scores revealed strengths and weaknesses among the medical staff. More training is recommended to enhance skills and promote positive behavior to boost hospital staff's job satisfaction and sense of belonging.

Keywords: Professionalism; Professional behavior; Professional climate; Iran; Medical ethics.

*Corresponding Author

Mahshad Noroozi

Address: Shahid Hemmat Highway, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.

Postal Code: 1449614535

Tel: (+98) 21 86 70 33 46

Email: noroozi.mahshad@iums.ac.ir

Received: 12 Jul 2025

Accepted: 5 Sep 2025

Published: 18 Oct 2025

Citation to this article:

Khalili A, Saeedi Tehrani S, Noroozi M, Hoveidamanesh S, Baradaran A, Hashemi A. Assessment of the medical professionalism climate in the inpatient units of a teaching hospital affiliated with Iran University of Medical Sciences (2023-2024). *J Med Ethics Hist Med*. 2025; 18: 12. <https://doi.org/10.18502/jmehm.v18i12.20000>

Introduction

Medical professionalism refers to the obligations resulting from a social agreement between healthcare providers and recipients (1). The American Board of Internal Medicine defines it via three core principles: prioritization of patient welfare, patient autonomy, and social justice (2). For the last twenty years, professionalism has been recognized as an important medical competency for physicians and has been added to the curricula of medical schools at all levels (3). Adherence to professionalism not only fosters patient trust in physicians and accelerates treatment but also ensures that actions are taken in the patient's best interest (1). Therefore, it is essential to implement programs across different levels of medical education that effectively train and evaluate medical students and residents in professionalism (4).

Studies have shown that medical students' clinical exposure during internships and clerkships is a primary motive for their development of medical professionalism. The hidden curriculum has an impact on their understanding and enactment of professionalism. It can continue to shape their professional

identity even after graduation (1). Thus, the professional climate of the educational setting is fundamental to developing professionalism in students beyond formal teaching and evaluation (1). Numerous studies have highlighted that medical students require more support, positive role modeling, and respectful, two-way communication from faculty in order to develop professional identity and view themselves as members of the treatment team (3,5, 6).

Teaching hospitals affiliated with medical schools are important educational environments that influence how students will act professionally. Accrediting bodies in many countries regularly evaluate the professional climate and behavior in these clinical settings. The purpose of evaluation is to identify strengths and weaknesses, and then implement corrective measures. For that reason, taking practical steps to create a strong training environment can encourage students to be professional (7, 8).

Self-evaluation and evaluation of others in one's surroundings is the most common way for assessing professionalism in clinical settings (7). However, such methods often fail to show the

full range and subtle effects of the clinical environment (7). This limitation has underscored the increasing necessity for more effective instruments to evaluate and promote a culture of professionalism within clinical settings over the past two decades. A positive professional climate is now recognized as an important factor that develops medical professionalism among students and staff, while a negative climate can severely compromise formal ethics training and diminish professional standards. Therefore, accurately assessing this climate is not just an academic exercise; it is a necessary step for carrying out effective interventions to improve learning and the clinical environment (9, 10).

The relationships, processes, and policies within each hospital constitute a powerful component of the informal and hidden curriculum, which is a fundamental element of the overall professional climate (3). Students observe and internalize professional behaviors, both positive and negative, exhibited by faculty and healthcare staff. This kind of learning is often more influential than the formal one in shaping their professional behavior, which shows how important it is to monitor the professional climate (3, 9). Therefore, ongoing concerns about inadequate role modeling within educational

departments highlight a fundamental deficiency in the professional climate itself. A comprehensive assessment of this climate effectively clarifies these latent influences, providing essential data for targeted interventions designed to improve the learning environment (9).

Furthermore, research shows that a negative professional environment can affect trainee well-being (10) and highlights the importance of cultural context in understanding professionalism (9, 11). This study aims to assess the professionalism climate at a comprehensive teaching hospital affiliated with Iran University of Medical Sciences. The choice of one hospital agrees with the specified aim of the questionnaire (Asghari et al., 2021), which is not to compare hospitals or influence department reputation, but rather to assess the professional behavior and climate status and provide constructive feedback for improvement. This hospital was chosen due to its comprehensive clinical and teaching environment. Previous studies in Iran have explored the subject of medical professionalism, including Eghbali et al., which used the ABIM questionnaire to assess professionalism among residents (12), and Hoobehfekr et al., which examined medical students' perceptions of the

professionalism climate (1). These studies did not use a comprehensive instrument, such as the Medical Professionalism Climate questionnaire by Asghari et al. (3), for evaluating both adherence to professional behaviors and the perceived professional climate among the entire clinical staff in a teaching hospital. We believe that the results of the present study will provide valuable information for planning targeted interventions that will make the clinical environment more professional.

Methods

A cross-sectional study was conducted between September 2023 and August 2024 on the faculty members, nursing staff, and specialized residents working at a teaching hospital Affiliated with Iran University of Medical Sciences.

The instrument employed in this study was "The Medical Professionalism Climate in Clinical Settings (from the Staff's Perspective)," developed, validated, and assessed for reliability by Asghari et al. (3). The mean CVI of the questionnaire was 0.945, and the intraclass correlation coefficient (ICC) was 0.816 at a significance level of 0.001.

There are 30 items on this questionnaire, which are divided into two main sections:

1. Adherence to Professional Behavior (21 questions)

2. Professional Climate (9 questions)

A convenience sampling method was used to recruit the study participants. After obtaining permission from the developers of the Persian version of the questionnaire, the instrument was prepared in two formats: an electronic version on Porsline (<https://porsline.ir/>), and a printed version. The researcher visited the educational medical center in person to invite individuals to participate in the study. After obtaining verbal consent from the participants, they were provided with either the online questionnaire link or the printed version.

The collected data were analyzed using SPSS version 26. According to the instructions provided by the tool developers, the scores for each section of the questionnaire were calculated out of 100. Depending on the type of the variables, descriptive statistics, non-parametric tests (including the Mann-Whitney U test and Kruskal-Wallis H test), and Spearman's correlation coefficient were used to analyze the obtained data. A significance level of 0.05 was considered for all the tests.

Results

A total of 271 individuals working at the hospital participated in this study, including nurses, nursing assistants, medical residents, and faculty members. 44.3% of the participants were male, and 55.7% were female, with a mean age of 34.79 ± 7.410 years. While 57.9% of the participants

worked in internal medicine departments, 22.1% were employed in surgical departments, and 80.4% had less than 5 years of work experience. In addition, 42.8% of the participants were specialized residents, and 31.7% were nurses (Table 1).

Table 1. Demographic characteristics of the study participants

	Variable	Frequency	Percentage	Missing Data
Gender	Female	151	55.7	-
	Male	120	44.3	
Hospital Ward	Operating room	12	4.4	1
	Emergency department	34	12.5	
	Surgery ward	60	22.1	
	Internal medicine ward	157	57.9	
	Intensive Care Unit	7	2.6	
	Nursing assistant	20	7.4	
Professional Title	Nurse	86	31.7	-
	Medical resident	116	42.8	
	Faculty member	49	18.1	
Years of Experience	Less than 5 years	218	80.4	2
	5 to 10 years	36	13.3	
	More than 10 years	14	5.2	

The mean scores for each questionnaire item were calculated in the professional climate and professional behavior domains. In the professional climate domain, item 2 (The quality of services provided is the same for all patients), 5 (Different members of the treatment team, including physicians, nurses, students, and other staff, collaborate effectively with each other), and 8 (Administrative and educational rules and regulations are followed) received the highest mean scores, respectively 3.42 ± 0.927 , $3.42 \pm$

0.798 , and 3.42 ± 0.839 . In contrast, item 7 (The professional behavior of individuals is recognized and encouraged) received the lowest score (2.55 ± 1.035).

In the professional behavior domain, the highest mean scores were obtained for items 6 (Share patients' information only with the treatment team, the patient, or their companion(s), and observe data confidentiality), 10 (Provide patients with sufficient medical information and seek their consent), 15 (Have a respectful

behavior towards one another), and 5 (Observe the university dress code), respectively 4.35 ± 0.826 , 4.14 ± 0.956 , 4.13 ± 0.829 , and 4.11 ± 0.795 . The lowest mean scores belonged to questions 12 (Are careful not to waste the time of colleagues, patients, and their companions) and 18 (Prioritize the patient's best interests over their own in clinical decision-making), respectively 2.85 ± 1.150 and 2.85 ± 1.276 . The average scores in all domains were much lower than the perfect score of 100. As shown in Table 2, there was no significant relationship between the participants' gender and the total mean score of the questionnaire, the score for professional behavior, and the score for professional climate. However, the hospital ward where the participants worked did show a significant association only with the overall mean score of the questionnaire.

A relationship was found between the participants' professional titles and the total mean score of the questionnaire, the professional behavior score, and the professional climate score. The nursing assistant group had the lowest mean score, while the faculty member group recorded the highest mean score.

There was also a relationship between the duration of the participants' work experience in

the department and the total mean score of the questionnaire, the professional behavior score, and the professional climate score. The results showed that participants with more years of work experience in the department had an improved perception of adherence to professional behavior and climate and therefore scored higher.

In the analysis using the Spearman Correlation test, there was a significant relationship between the age of the participants, and the total score of the questionnaire and the professional climate score ($P\text{-value} < 0.05$). However, the professional behavior score did not demonstrate a significant relationship with the participants' age, as indicated by the same test ($P\text{-value} = 0.283$).

Table 2. Association between demographic characteristics and the total mean score, professional behavior score, and professional climate score

Variable		Overall Score	Professional Behavior Score	Professional Climate Score
Age	Spearman's correlation coefficient	0.122	0.065	0.207
	P-value	0.044	0.283	0.001
	N	271	271	271
Gender	Female	Mean±SD	58.79±15.811	62.59±16.525
		N	151	151
	Male	Mean±SD	57.84±13.399	61.84±15.157
		N	120	120
	P-value	0.713*	0.802*	0.719*
Hospital Ward	Operating room	Mean±SD	59.09±17.543	63.09±18.768
		N	12	12
	Emergency department	Mean±SD	60.85±13.819	64.77±15.327
		N	34	34
	Surgery ward	Mean±SD	53.79±14.806	57.59±15.283
		N	60	60
	Internal medicine ward	Mean±SD	59.64±14.798	63.55±16.105
		N	157	157
	Intensive Care Unit	Mean±SD	57.14±7.117	61.22±9.319
		N	7	7
	P-value	0.046**	0.082**	0.061**
Professional Title	Nursing assistant	Mean±SD	45.54±12.155	49.88±13.725
		N	20	20
	Nurse	Mean±SD	55.71±13.664	59.85±15.217
		N	86	86
	Medical resident	Mean±SD	57.77±14.509	62.25±16.235
		N	116	116
	Faculty member	Mean±SD	69.67±11.027	71.55±12.053
		N	49	49
	P-value	< 0.001**	< 0.001**	< 0.001**
Years of Experience	Less than 5 years	Mean±SD	56.87±14.177	60.92±15.477
		N	218	218
	5 to 10 years	Mean±SD	63.75±14.478	67.42±15.990
		N	36	36
	More than 10 years	Mean±SD	65.05±18.740	66.49±17.742
		N	14	14
	P-value	0.005**	0.039**	0.001**

* Mann-Whitney U

**Kruskal-Wallis H

Discussion

This study evaluated the professionalism climate, including adherence to professional behavior and the perceived environment, among physicians, residents, nurses, and nursing assistants at an

Iranian teaching hospital. The results show clear strengths and weaknesses, and strong differences influenced by the participants' professional roles and levels of experience. The overall scores, as well as the scores for only the professional

behavior and climate, were related to professional titles. The faculty members had the highest scores, followed by the residents, nurses, and nursing assistants, respectively. This finding indicates that individuals in elevated positions of authority view the professional environment more favorably. In other words, People's attitudes towards professionalism and the learning environment are influenced by hierarchy and authority. Senior staff have more autonomy and power in making decisions, and a greater sense of ownership of the clinical environment, so they feel the professional environment is more favorable (13-15).

A positive correlation was found between the duration of work experience in the department and the average scores of professionalism behavior and climate. This shows that staff who have been there longer think that professional norms are followed more closely and have a more positive view of the workplace. This is compatible with the literature, which indicates that being in a clinical setting for a long time may cause a process of acclimatization or a "survivorship bias." This means that people who stay in the profession have a good opinion of its cultural norms. But this view also implies that more experienced employees have either learned

how to deal with the challenges or have earned enough respect in the hierarchy to feel that the work environment is acceptable (16-18).

In evaluating professional behavior, the mean scores for various questions demonstrate adherence to specific professional standards in different departments of the teaching hospital. Our findings indicate a strong commitment among the hospital staff to protect patient privacy. Physicians and other healthcare professionals in this environment are fully aware of the principle of patient confidentiality, and according to the participants in this study, they consistently adhere to it in practice. Preserving confidentiality can enhance patient satisfaction and trust in the healthcare team and help prevent future issues in the relationship between healthcare professionals and service recipients. Confidentiality has long been regarded as an essential principle of the medical profession, as demonstrated by the earliest medical oaths, and its observance continues to be a significant concern highlighted in professional guidelines (19).

The high average score for following the professional dress code indicates that hospital staff generally adhere to appropriate workplace attire guidelines. This builds trust among

healthcare workers and can help reduce infection risks, minimize issues within the hospital, and enhance patient safety. A professional appearance, particularly among physicians, can improve communication, treatment outcomes, patients' overall satisfaction and their perceptions of professionalism (20, 21). According to the findings of one study, both staff and patients in psychiatric and general hospitals prefer to follow formal dress codes (7).

In this study, a high mean score was achieved in providing adequate information and obtaining patient consent (item 10), which is an ethical principle in the medical and nursing professions and one that directly impacts the quality of care. Patients have the right to be fully informed about their health, treatment options, and potential consequences, as this will enhance their participation in decision-making (22) and promote trust in healthcare professionals. Obtaining informed consent is important for the doctor-patient relationship, as patients need to know about medical procedures, their benefits, and possible risks (22).

Based on our findings, the participants generally feel that hospital staff treat each other with respect, which is essential for inter-professional collaboration. Respectful relationships,

particularly those with authoritative members such as faculty, can reduce burnout, decrease trauma, enhance job satisfaction, and improve performance. Gillespie et al. found that respect is linked to professionalism and that disrespectful environments make it more difficult to act professionally (4). Brazeau et al. also found a link between professionalism, empathy, and job burnout (10). Physicians and nurses build professional relationships based on autonomy, respect, dignity, and responsibility (13).

The low average score for not wasting the time of colleagues, patients or their companions shows that staff have not done well in areas such as managing their time when interacting with coworkers and patients, or that they could do better. Since time is so important in healthcare systems, a low score in this area can mean less work gets done and the quality of service goes down. The high number of patients, staff shortages, and the need to cover the duties of other colleagues may be reasons for wasting others' time (23, 24). On the other hand, staff fatigue and burnout caused by long shifts can make it challenging to address the needs of others in a timely manner. Further studies are expected to identify the factors influencing this issue in professional behavior. Providing time

management training through workshops and related programs can help staff optimize their interactions and tasks, and prevent this issue.

The finding that some hospital staff may prioritize personal interests over the best interests of patients in clinical decision-making is concerning. It raises serious ethical questions about the duty of healthcare professionals to prioritize patients' best interests, known as "beneficence" (25). In high-pressure environments with limited resources, it is hard for professionals to balance personal, organizational, and patient interests (26). Despite these challenges, patients should always take priority. It is essential to assess and address factors that contribute to neglecting patients' interests, and to equip healthcare professionals with the necessary resources, required training, and ethical guidelines to support them in making patient-centered decisions.

Healthcare delivery systems face increasing pressure to reduce costs while preserving quality. Value-based care puts service quality and resource efficiency first (27). Inefficient use of supplies increases expenses and negatively affects patient care. Research shows that good resource management leads to better patient outcomes and faster service (28). Therefore, the

low average score for professionals in avoiding waste should be addressed as it could mean that the staff does not know how or has not been trained to manage clinical resources. Understanding available supplies and committing to waste-reducing methods are essential for resource management. It is also important to create a culture of accountability in healthcare delivery (29). Also, training sessions on how to properly allocate resources can help improve this situation. In a professional climate, it is important to pay attention to the weaknesses identified by members. A study by Hossny and Sabra discovered a relationship between the level of collaboration between physicians and nurses and a positive workplace environment, and concluded that it could enhance the quality of services (30).

Insufficient conflict management services demonstrate shows weak feedback mechanisms. Addressing patient concerns improves service quality and organizational learning. Failure to use this mechanism can result in persistent issues that affect patient satisfaction and safety (31). Furthermore, participants in this study noted that the organization's approach to providing respectful responses when mistakes occurred was weak, indicating a disregard for improving and

maintaining safety. A positive safety culture encourages open communication and learning from mistakes. Lack of effective and respectful feedback mechanisms create fear, discouraging error reporting and undermining patient safety initiatives (32).

According to our findings, positive professional behavior is not sufficiently recognized or rewarded. Recognizing and reinforcing the professional behavior of staff and providing positive feedback are essential for creating a positive work environment (33). It can motivate employees to maintain high professional standards. In general, an organization's leaders should actively identify their employees' strengths and, after recognizing them, commend their achievements and contributions to better management performance. Adopting such positive leadership behaviors and fostering a healthy work environment enables employees to act more responsibly and with greater satisfaction in the organization's service delivery processes (33). The study by Farhadi et al. found that nurses are less satisfied with communication and interaction patterns in clinical settings than physicians. Furthermore, nurses indicated a greater need for support and encouragement from physicians (13).

The Strengths and Weaknesses

The present study used a validated and localized adapted tool to assess the professionalism climate in clinical settings. In addition, different professional groups were recruited as study participants to obtain a comprehensive perspective. The diversity contributed to a broader understanding of role-specific differences in perceptions of professionalism. This study specifically focused on a teaching hospital, which is a key environment for the formation of professional identities of medical students, and this focus helped to identify issues specific to educational settings.

It must be acknowledged, however, that the present study has some limitations. The use of convenience sampling may have led to selection bias and limited the generalizability of the findings. Additionally, the questionnaire was self-reported, so the results could have been influenced by the participants' tendency to provide favorable responses.

Conclusion

This study highlights the need for institutional strategies to respond to differences between healthcare professionals' perceptions of the professionalism climate at an Iranian teaching

hospital. The results show that there are several points of strength, especially in preserving patient confidentiality, following professional dress codes, and treating other members of the staff respectfully. The findings also suggest that suitable professional conduct is evident in the hospital. However, there are problems in areas such as putting patients' interests first in clinical decision-making, maintaining efficient time management, using resources wisely, and setting up ways to provide and obtain feedback. These deficiencies naturally impact various professional groups and will need to be addressed.

The differences influenced by the participants' work experience and professional roles show how important it is for institutions to have practical plans to resolve the current issues. Future interventions should focus on promoting an environment that preserves current strengths while addressing and resolving existing issues.

Funding

The authors received no financial support for this article's research, authorship, and/or publication.

Conflict of Interests

The authors declare no potential conflicts of interests in this article.

Ethics Approval

The study was approved by the Ethics committee of Iran University of Medical Sciences, Tehran, Iran (IR.IUMS.FMD.REC.1401.508).

Consent for Publication

All authors have been informed of the intention to submit this manuscript for publication and have consented.

Consent to Participate

Obtaining written informed consent from participants was not applicable. At the outset of the questionnaire, participants were provided with comprehensive information about the study's objectives, and as for confidentiality of their responses, they were assured that no personally identifiable information would be collected. Completion and submission of the questionnaire were regarded as an indication of informed consent to participate in the research.

Clinical Trial Number

Not applicable

References

- 1- Hoobehfekar S, Asghari F, Sayarifard A, Kadivar M, Kashefinejad S. Medical students' perception of professionalism climate in clinical settings. *J Med Ethics Hist Med*. 2021; 14: 10. doi: 10.18502/jmehm.v14i10.7238 .
- 2- Blank L, Kimball H, McDonald W, Merino J; ABIM Foundation; ACP Foundation; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter 15 months later. *Ann Intern Med*. 2003; 138(10): 839-41. doi: 10.7326/0003-4819-138-10-200305200-00012.
- 3- Asghari F, Shahvari Z, Ebadi A, et al. Developing and validating an instrument to measure: the medical professionalism climate in clinical settings. *J Med Ethics Hist Med*. 2021; 14: 11. doi: 10.18502/jmehm.v14i11.7666.
- 4- Gillespie C, Paik S, Ark T, Zabar S, Kalet A. Residents' perceptions of their own professionalism and the professionalism of their learning environment. *J Grad Med Educ*. 2009; 1(2): 208-15. doi: 10.4300/JGME-D-09-00018.1.
- 5- Yilmaz ND, Velipasaoglu S, Ozan S, et al. A multicenter study: how do medical students perceive clinical learning climate? *Med Educ Online*. 2016; 21: 30846. doi: 10.3402/meo.v21.30846.
- 6- Emilia O, Suhoyo Y, Utomo PS. Teacher as role model in developing professional behavior of medical students: a qualitative study. *Int J Med Educ*. 2023; 14: 55-62. doi: 10.5116/ijme.6443.ae49.
- 7- Quaintance JL, Arnold L, Thompson GS. Development of an instrument to measure the climate of professionalism in a clinical teaching environment. *Acad Med*. 2008; 83(10 Suppl): S5-8. doi: 10.1097/ACM.0b013e318183e3d4.
- 8- Girotto LC, Machado KB, Moreira RFC, Martins MA, Tempski PZ. Impacts of the Accreditation Process for Undergraduate Medical Schools: A Scoping Review. *Clin Teach*. 2025; 22(2): e70031. doi: 10.1111/tct.70031.
- 9- Aziz AB, Ali SK. Relationship between level of empathy during residency training and perception of professionalism climate. *BMC Med Educ*. 2020; 20(1): 320. doi: 10.1186/s12909-020-02231-0.

- 10- Brazeau CM, Schroeder R, Rovi S, Boyd L. Relationships between medical student burnout, empathy, and professionalism climate. *Acad Med.* 2010; 85(10 Suppl): S33-6. doi: 10.1097/ACM.0b013e3181ed4c47.
- 11- Guraya SY, Sulaiman N, Guraya SS, et al. Understanding the climate of medical professionalism among university students; A multi-center study. *Innovations in Education and Teaching International.* 2021; 58(3): 351-60. doi: 10.1080/14703297.2020.1751237.
- 12- Eghbali F, Seyedpour SM, Pazouki A, Hosseini-Baharanchi FS. Professionalism in Residents of Iran University of Medical Sciences Hospitals and its Associated Factors. *Iranian Journal of Surgery.* 2017; 25(3): 45-53. [in Persian]
- 13- Farhadi A, Elahi N, Jalali R. The effect of professionalism on the professional communication between nurses and physicians: A phenomenological study. *J Nurs Midwifery Sci.* 2016; 3(3): e141224. doi: 10.18869/acadpub.jnms.3.3.18.
- 14- Singh PK, Singh S, Ahmad S, Singh VK, Kumar R. Navigating power dynamics and hierarchies in medical education: Enhancing faculty experiences and institutional culture. *J Postgrad Med.* 2025;71(2):82-90. doi: 10.4103/jpgm.jpgm_728_24.
- 15- Salehi PP, Jacobs D, Suhail-Sindhu T, Judson BL, Azizzadeh B, Lee YH. Consequences of Medical Hierarchy on Medical Students, Residents, and Medical Education in Otolaryngology. *Otolaryngol Head Neck Surg.* 2020; 163(5):906-914. doi: 10.1177/0194599820926105.
- 16- Beus JM, Bergman ME, Payne CS. The influence of organizational tenure on safety climate strength: A first look. *Accident Analysis & Prevention.* 2010; 42(5): 1431-1437. doi: 10.1016/j.aap.2009.06.002.
- 17- Zhenjing G, Chupradit S, Ku KY, Nassani AA, Haffar M. Impact of Employees' Workplace Environment on Employees' Performance: A Multi-Mediation Model. *Front Public Health.* 2022; 10:890400. doi: 10.3389/fpubh.2022.890400.
- 18- Cang X. Vining in the Blind: The Perils of Survivorship Bias. *Advances in Economics, Management and Political Sciences.* 2024; 72. doi: 10.54254/2754-1169/72/20240675.
- 19- Parsa M. Medicine and patients' privacy. *IJMEHM* 2009; 2(4): 1-14. [in Persian]

- 20- Petrilli CM, Saint S, Jennings JJ, Caruso A, Kuhn L, Snyder A, Chopra V. Understanding patient preference for physician attire: a cross-sectional observational study of 10 academic medical centres in the USA. *BMJ Open*. 2018; 8(5): e021239. doi: 10.1136/bmjopen-2017-021239.
- 21- Kim J, Ba Y, Kim JY, Youn BY. Patient perception of physician attire: a systematic review update. *BMJ Open*. 2025; 15(8): e100824. doi: 10.1136/bmjopen-2025-100824.
- 22- Paterick TJ, Carson GV, Allen MC, Paterick TE. Medical informed consent: general considerations for physicians. *Mayo Clin Proc*. 2008; 83(3): 313-9. doi: 10.4065/83.3.313.
- 23- Addis BA, Gelaw YM, Eyowas FA, Bogale TW, Aynalem ZB, Guadie HA. "Time wasted by health professionals is time not invested in patients": time management practice and associated factors among health professionals at public hospitals in Bahir Dar, Ethiopia: a multicenter mixed method study. *Front Public Health*. 2023; 11:1159275. doi: 10.3389/fpubh.2023.1159275.
- 24- James KA, Ross SE, Vance B, Nath R, Harrison MI, West DR. INEFFICIENCY IN PRIMARY CARE: Common Causes and Potential Solutions. Available from <https://www.aafp.org/pubs/fpm/issues/2015/0300/p18.pdf> (Accessed on 2025).
- 25- Keane D, Harman-Jones B, Khalid O, Hakeem S, Sarfraz MA. The way doctors dress: stakeholder preferences and the impact on their perceptions. *British Journal of Medical Practitioners*. 2019; 12(3): a018.
- 26- Hansson SO, Fröding B. Ethical conflicts in patient-centred care. *Clinical Ethics*. 2021; 16(2): 55-66. doi:10.1177/1477750920962356.
- 27- Porter ME, Lee TH. The Strategy That Will Fix Health Care. *Harvard Business Review*. 2013; 91(10): 50-70.
- 28- Bhati D, Deogade MS, Kanyal D. Improving Patient Outcomes Through Effective Hospital Administration: A Comprehensive Review. *Cureus*. 2023; 15(10): e47731. doi: 10.7759/cureus.47731.
- 29- Kluge EH. Resource allocation in healthcare: implications of models of medicine as a profession. *MedGenMed*. 2007; 9(1): 57.
- 30- Hossny EK, Sabra HE. Effect of nurses' perception to workplace civility climate on nurse-physician collaboration. *Nurs Open*. 2021; 8(2): 620-627. doi: 10.1002/nop2.666.

- 31- van Dael J, Reader TW, Gillespie A, Neves AL, Darzi A, Mayer EK. Learning from complaints in healthcare: a realist review of academic literature, policy evidence and front-line insights. *BMJ Qual Saf.* 2020; 29(8): 684-695. doi: 10.1136/bmjqs-2019-009704.
- 32- Mistri IU, Badge A, Shahu S. Enhancing Patient Safety Culture in Hospitals. *Cureus.* 2023; 15(12): e51159. doi: 10.7759/cureus.51159.
- 33- Yang T, Jiang X. When colleague got recognized: Third-party's reaction to witnessing employee recognition. *Front Psychol.* 2023; 14: 968782. doi: 10.3389/fpsyg.2023.968782.