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Cultivating Professional Ethics in Teaching Assistants: Identifying Challenges and Proposing Effective Strategies

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ABSTRACT

Teaching Assistants (TAs), particularly in fields such as medical sciences, occupy a unique and critical position, serving as both learners and educators. Their professional ethics significantly influence the quality of education, clinical practice, and patient safety. Despite their pivotal role, TAs often face distinct challenges that can impact their adherence to ethical standards. This conceptual article aims to identify and elaborate on the multifaceted challenges hindering the optimal cultivation of professional ethics among teaching assistants and to propose effective strategies for their improvement. Drawing upon existing literature primarily from medical education and professional ethics, this paper synthesizes common stressors, educational gaps, and environmental factors that impede ethical conduct. Hypothetical solutions discussed include the implementation of comprehensive, integrated ethics curricula, robust mentorship and role-modeling programs, promotion of well-being initiatives, and the integration of dialogic and reflective assessment methods. By addressing these challenges through structured and sustained interventions, educational institutions can significantly enhance the professional ethical standards of their teaching assistants, thereby contributing to a higher quality of education and patient care.

Keywords

Teaching Assistants, professional ethics, medical education, challenges, solutions, curriculum, mentorship, wellbeing, quality improvement.

INTRODUCTION

Teaching Assistants (TAs) are indispensable to higher education, particularly within demanding disciplines such as medical sciences. They bridge the gap between faculty and students, contributing significantly to practical instruction, clinical supervision, research mentorship, and formative assessment [6, 8, 10, 18]. In medical contexts, TAs often serve as residents, interns, or junior faculty members who are simultaneously undergoing specialized training and imparting knowledge and skills to undergraduate medical students or junior residents. This dual role positions them at a critical nexus where their professional conduct and ethical adherence profoundly impact not only the learning environment but also, directly or indirectly, patient care and safety [2, 3, 10].

Professional ethics, encompassing principles such as beneficence, non-maleficence, autonomy, justice, integrity, and accountability, are foundational to the medical profession [12, 19, 32, 35]. For teaching assistants in medical fields, upholding these ethical standards is not merely an academic requirement but a practical necessity, guiding their interactions with patients, colleagues, supervisors, and students [13, 24]. The quality of clinical education, resident training, and ultimately, patient outcomes are intimately linked to the ethical integrity and professionalism of these vital educational facilitators [3, 6, 48, 52, 55].

Despite the recognized importance of professional ethics, teaching assistants, particularly those in demanding residency or clinical training programs, encounter a myriad of challenges that can compromise their ethical formation and practice. These challenges range from systemic issues like intense workloads and occupational stress to pedagogical gaps in ethics education and the influence of the clinical environment [5, 10, 11, 14, 15, 16, 26, 62]. Unaddressed, these impediments can lead to burnout, erosion of ethical principles, and potentially detrimental impacts on teaching quality and patient well-being.

Therefore, identifying and thoroughly understanding these challenges is the prerequisite for developing effective, sustainable solutions. This article aims to address this critical need by synthesizing existing literature to illuminate the key challenges faced by teaching assistants in upholding and developing their professional ethics. Furthermore, it proposes a conceptual framework of effective strategies to mitigate these challenges, thereby improving the quality of ethical conduct and, by extension, the overall educational and clinical experience. The insights gathered will inform curriculum developers, program directors, and policymakers in designing interventions that foster a robust ethical foundation for future medical professionals and educators.

Research Questions:

- 1. What are the primary challenges that impede the cultivation and maintenance of professional ethics among teaching assistants in medical education settings?
- 2. What effective solutions and strategies can be implemented to address these challenges and enhance the quality of teaching assistants' professional ethics?

Literature Review

The professional ethics of teaching assistants (TAs), particularly in the high-stakes environment of medical education, is a multifaceted construct influenced by individual factors, educational curricula, and the broader organizational culture. A significant body of literature highlights the critical role of ethics and professionalism, while simultaneously revealing numerous challenges and proposing various solutions.

The Foundational Importance of Professional Ethics in Medical Education

Professional ethics forms the bedrock of medical practice and education. It involves a commitment to moral principles, values, and duties that guide behavior in professional roles [17, 19, 24, 30, 32, 35, 36, 58]. For medical teaching assistants (often residents), these ethics are crucial as they are both learners and educators [13, 40, 53]. Their professionalism directly impacts patient satisfaction and outcomes [2, 10], and the quality of residency education is closely monitored for improvement [6]. Institutions recognize the need for robust ethics education to ensure future healthcare professionals are equipped to navigate complex moral dilemmas [12, 31, 33, 42, 63]. Moreover, the importance of professional ethics extends to teaching quality, with studies showing a relationship between the two for faculty members [52].

Challenges to Professional Ethics among Teaching Assistants/Residents

Despite its importance, several challenges can impede the cultivation and adherence to professional ethics among TAs/residents.

Occupational Stress and Burnout

A prominent challenge is the high level of occupational stress and burnout prevalent among medical residents and TAs. Studies consistently report significant stress levels [14, 15] and high prevalence of burnout [5]. Factors contributing to this include demanding workloads, long working hours [10], and intense emotional labor [11]. This chronic stress can negatively impact job satisfaction [4] and lead to exhaustion, cynicism, and reduced professional efficacy, potentially eroding ethical behavior [11]. The implementation of work hour restrictions has been linked to reductions in mortality and provider-related complications, highlighting the direct impact of workload on patient safety and, implicitly, ethical practice [10].

Gaps in Ethics Education and Curriculum

A significant concern revolves around the adequacy and effectiveness of formal ethics education. While many programs aim to instill ethical values, there are often gaps in how ethics are taught and reinforced [26, 27, 28, 29, 45, 50, 60, 61, 62]. Some studies indicate that medical students and residents may lack sufficient knowledge of medical ethics and law [25, 26, 28, 29]. Challenges in teaching medical ethics include professors' own difficulties in addressing complex ethical dilemmas and a lack of formalized curriculum [47, 62]. There's a recognized need for a structured and comprehensive ethics curriculum that goes beyond theoretical knowledge to practical application and moral competence [23, 31, 57].

Learning Environment and Role Modeling

The clinical learning environment significantly shapes professional identity and ethical development [53, 54]. However, this environment can also present challenges. Negative workplace attitudes, including bullying, can affect residents' well-being and professional development [16]. The role models TAs encounter—faculty members and senior residents—profoundly influence their ethical formation [34, 39, 53]. If role models exhibit unprofessional or unethical behavior, it can undermine formal ethics education. Students' perceptions of the relationship between professors and patients can directly impact their professional ethics [34]. The quality of clinical education itself, including feedback and evaluation, also plays a role in residents' overall satisfaction and learning [6, 8, 48, 49, 55]. Conflicting Expectations and Lack of Clarity

TAs often juggle multiple responsibilities—learner, educator, clinician, and sometimes researcher. This can lead to conflicting expectations regarding their roles and priorities, potentially creating ethical dilemmas. A lack of clear guidelines on ethical conduct in specific teaching or clinical scenarios can also contribute to challenges [26].

Effective Solutions and Strategies

Literature points to various strategies to address these challenges and enhance professional ethics among TAs. Comprehensive and Integrated Ethics Curricula

Developing and implementing well-designed, integrated ethics curricula is paramount [17, 23, 27, 31, 50, 57, 61, 63]. Such curricula should be longitudinally embedded throughout training, moving beyond didactic lectures to include interactive methods like case studies, simulations [9], and Objective Structured Teaching Exercises (OSTEs) [38]. The curriculum should emphasize practical application, moral reasoning, and professional commitment [56]. Some frameworks suggest an "ethical sense" approach to ethics education [42], or a focus on "maieutics" to foster deeper ethical competence [42]. Narratives can also be employed to explore moral competence [43]. It's crucial for these curricula to be continually assessed and improved [3].

Mentorship and Positive Role Modeling

Fostering positive role modeling and mentorship is a powerful strategy [39, 53]. Senior faculty and experienced residents can serve as ethical exemplars, demonstrating ethical conduct in daily practice. Programs should actively encourage and support mentorship relationships where ethical dilemmas can be discussed in a safe and supportive environment [53]. The professionalism of clinical teachers themselves is a critical factor in clinical education [40]. Promoting Well-being and Addressing Stress

Institutions must prioritize resident well-being through initiatives that address occupational stress and burnout [11]. This includes optimizing the learning environment, managing workloads, providing access to mental health resources, and fostering a supportive culture [11]. Reducing bullying and negative workplace attitudes is also essential for creating a healthier ethical environment [16].

Dialogic and Reflective Practices

Encouraging regular reflection and dialogic engagement on ethical issues can deepen understanding and foster ethical competence [42]. This can be achieved through debriefing sessions, ethics rounds, and reflective writing assignments [14, 41]. Creating opportunities for open discussion about ethical dilemmas and their solutions promotes critical thinking and moral reasoning [41, 42].

Assessment and Evaluation of Professional Ethics

Regular assessment of ethical knowledge and practice is crucial for identifying areas for improvement [22, 25, 26, 29]. This can include objective structured clinical examinations (OSCEs) with ethical components, peer and supervisor evaluations, and even patient feedback. Implementing changed codes of ethics and professional character, with subsequent evaluation of their effect on hospital protocols and assistant behavior, can lead to measurable improvements [44].

Continuous Quality Improvement

Beyond individual interventions, a systemic approach to quality improvement in residency education is necessary [3, 6, 48, 49]. This involves ongoing monitoring, evaluation, and adaptation of educational programs to ensure they meet ethical standards and effectively prepare TAs for their professional responsibilities. The perceived quality of teaching can be improved through a focus on professional ethics [52], and adherence to professional ethics can significantly influence patient safety culture [59].

METHODS

This article presents a conceptual framework derived from an extensive literature review, rather than empirical data. However, it outlines the methodological considerations for a future empirical study designed to identify and explain the challenges and effective solutions to improve the quality of teaching assistants' professional ethics. Such a study would ideally employ a qualitative research design to capture the nuanced experiences and perspectives of TAs and faculty.

Research Design

A descriptive qualitative research design, potentially using a grounded theory approach [20, 21] or qualitative content analysis, would be suitable for this inquiry. This approach would allow for an in-depth exploration of the complex interplay of factors influencing professional ethics in TAs. The aim would be to develop a comprehensive understanding of the challenges from the perspectives of those directly involved and to identify effective strategies as described or experienced by them.

Participants and Context

The target population for an empirical study would be teaching assistants (e.g., medical residents) and their supervisors (e.g., attending physicians, faculty members) in educational hospitals or university medical centers.

- Inclusion Criteria: TAs/residents actively involved in teaching or supervising students, and faculty members who directly supervise TAs, working in medical sciences programs.
- Sampling: Purposive sampling would be employed to select participants who can offer rich insights into the phenomenon. This would involve selecting participants with varying levels of experience, across different specialties, and from diverse institutional settings to capture a broad range of perspectives. A sample size sufficient to achieve data saturation (e.g., 15-30 participants for each group) would be targeted.

Data Collection Approaches

A multi-modal data collection strategy would ensure comprehensive data generation:

- Semi-structured Individual Interviews: This would be the primary data collection method. Interviews with TAs/residents would explore their personal experiences with ethical dilemmas, the challenges they face in maintaining ethical standards, their perceptions of ethics education, and their ideas for improvement. Interviews with faculty supervisors would explore their observations of TAs' ethical conduct, the challenges they perceive, the effectiveness of current ethics training, and proposed solutions. Interviews would be audio-recorded and transcribed verbatim.
- Focus Group Discussions: Group discussions with both TAs/residents and faculty could facilitate richer insights through shared experiences and debates. This method would allow for the exploration of common challenges and the collaborative generation of potential solutions.

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- Document Analysis: Reviewing existing documents such as:
- o Curriculum documents related to professionalism and ethics training for TAs/residents.
- o Institutional policies on professional conduct and ethics.
- o Evaluation forms used for TAs' professional behavior.
- o Reports on quality improvement initiatives in resident education.

This would provide contextual information and triangulate findings from interviews and focus groups.

Data Analysis

Qualitative data would be analyzed using thematic analysis [20, 21]. This iterative process would involve:

- Familiarization: Repeated reading of interview transcripts and field notes to gain a deep understanding of the data.
- Initial Coding: Generating initial codes from the data, capturing emerging ideas related to challenges and solutions in TA professional ethics.
- Searching for Themes: Grouping related codes into broader, overarching themes and sub-themes.
- Reviewing Themes: Refining and defining the themes, ensuring they are distinct, coherent, and accurately reflect the data. This would involve checking for consistency across different data sources (interviews, focus groups, documents).
- Defining and Naming Themes: Developing clear, concise names and definitions for each theme, supported by illustrative quotes from participants.

The analysis would aim to identify patterns, commonalities, and unique perspectives regarding the challenges TAs face and the proposed solutions.

Ethical Considerations

All research procedures would adhere to stringent ethical guidelines.

- Institutional Review Board (IRB) Approval: The study protocol would be submitted and approved by the relevant university and hospital IRBs.
- Informed Consent: All participants would receive comprehensive information about the study's purpose, procedures, potential risks and benefits, and confidentiality measures. Written informed consent would be obtained prior to any data collection.
- Anonymity and Confidentiality: Measures would be taken to ensure participant anonymity (e.g., using pseudonyms in transcripts) and confidentiality of data. All data would be stored securely on password-protected devices or servers.
- Voluntary Participation: Participation would be entirely voluntary, and participants would be informed of their right to withdraw from the study at any time without penalty.
- Researcher Reflexivity: The research team would maintain reflexivity throughout the study, acknowledging and documenting their own biases and assumptions that might influence data collection or interpretation.

RESULTS

This section presents illustrative "results" derived from a synthesis of the provided literature and theoretical understanding, demonstrating the types of findings an empirical study employing the outlined qualitative methods would likely uncover regarding challenges and solutions in TA professional ethics.

Identified Challenges Impeding TA Professional Ethics

Hypothetically, an empirical study would reveal several core challenges that significantly impact the professional ethics of teaching assistants.

Pervasive Occupational Stress and Burnout

Interview data would likely highlight the overwhelming burden of occupational stress and burnout as a primary challenge. TAs would describe experiencing intense physical and emotional exhaustion due to long working hours,

heavy patient loads, and academic pressures [5, 11, 14, 15]. For instance, a hypothetical resident might state, "It's hard to focus on patient education or even ethical communication when you've been on call for 30 hours straight. You're just trying to survive the shift." This stress could lead to depersonalization, reduced empathy, and a diminished capacity for ethical reasoning in challenging situations, consistent with literature on resident well-being [11].

Gaps and Inadequacies in Formal Ethics Education

Findings would indicate that while ethics are generally mentioned in the curriculum, formal education often lacks practical relevance, integration, and continuous reinforcement. TAs might perceive ethics lectures as theoretical or disconnected from their daily clinical realities. A hypothetical TA might lament, "We had a few lectures on medical ethics in our first year, but it felt very abstract. No one really taught us how to deal with conflicts of interest when we're also trying to get a good evaluation from a senior doctor." This reflects existing concerns about the practical application of ethics knowledge [26, 27, 28, 29, 45, 62].

Negative Influences from the Clinical Environment and Role Models

The study would likely uncover instances where the clinical environment inadvertently compromises ethical development. TAs might witness senior colleagues or faculty engaging in behaviors that contradict ethical principles, such as disrespect towards patients or colleagues, or a disregard for protocol. This can create a conflict between formal ethical training and observed practice. A hypothetical faculty member might acknowledge, "Sometimes, in the heat of a busy clinic, professionalism might take a backseat for some. It's not ideal, but it happens." This highlights the powerful, sometimes negative, influence of role modeling [16, 34, 39, 53].

Conflicting Demands and Role Ambiguity

TAs would articulate the struggle of balancing their roles as learners, clinicians, and educators. This multi-faceted responsibility can lead to ethical dilemmas where the demands of one role (e.g., completing patient charts for discharge) conflict with another (e.g., spending time mentoring a junior student on a complex ethical case). A hypothetical TA might say, "Am I a student, a doctor, or a teacher? Sometimes it's hard to know which hat to wear, and that can make ethical decisions complicated." This ambiguity can create stress and uncertainty about ethical priorities.

Identified Effective Solutions and Strategies

Hypothetically, the study would also reveal a range of effective solutions, often proposed by participants themselves, echoing established best practices in ethics education and professional development.

Integrated and Experiential Ethics Curriculum

Participants would advocate for ethics education that is seamlessly integrated into clinical rotations and incorporates experiential learning. This would involve case-based discussions, simulations [9], and facilitated debriefings of real-life ethical dilemmas encountered in practice. A hypothetical faculty member might suggest, "Instead of just lectures, we need more problem-based learning where TAs can actively discuss and resolve ethical dilemmas in a safe setting." This aligns with calls for practical and applied ethics education [17, 31, 38, 41, 42, 43, 50, 56, 57, 61, 63].

Structured Mentorship and Positive Role Modeling Programs

The critical role of positive role models would be strongly emphasized. The study would find that formal mentorship programs, where TAs are paired with faculty known for their ethical integrity and who are committed to discussing ethical challenges, are highly effective. A hypothetical TA might describe, "My mentor openly discusses ethical challenges she faces. That's more impactful than any lecture because it shows me how to navigate real-world situations ethically." This reinforces the impact of strong role models [39, 53].

Prioritizing Well-being and Workload Management

Participants would highlight the necessity of institutional support for TA well-being. Solutions would include

advocating for reasonable work hours, providing accessible mental health services, and fostering a culture that normalizes seeking support for stress and burnout. A hypothetical resident might say, "If I'm not completely burnt out, I can think clearer and make better decisions, including ethical ones." This directly addresses the link between well-being and ethical practice [11, 14, 15].

Regular Dialogic Feedback and Reflective Practice

The importance of continuous feedback on professional behavior and ethics would emerge as a key solution. TAs would value opportunities for structured reflection on ethical challenges they faced, guided by supervisors. A hypothetical TA might state, "Having a safe space to discuss a challenging ethical interaction with a patient, and getting feedback on how I handled it, was incredibly helpful." This promotes metacognition and reinforces ethical decision-making [5, 6, 14, 16, 42].

Clear Ethical Guidelines and Policies

Participants would emphasize the need for clear, accessible institutional guidelines and policies regarding professional ethics in all TA roles (clinical, teaching, research). This reduces ambiguity and provides a framework for ethical decision-making. The positive impact of implementing changed codes of ethics on behavior would also be recognized [44].

DISCUSSION

The hypothetical findings, drawing from a synthesis of extensive literature, strongly affirm that the professional ethics of teaching assistants in medical education are shaped by a complex interplay of personal well-being, educational inputs, and the pervasive influence of the clinical environment. Addressing the identified challenges requires a multi-pronged, systemic approach rather than isolated interventions.

The overwhelming impact of occupational stress and burnout on ethical behavior resonates with the well-documented challenges faced by medical residents globally [5, 11, 14, 15]. When TAs are pushed to their limits, their capacity for empathy, careful deliberation, and adherence to ethical protocols can be significantly compromised. This highlights that fostering ethical conduct is not solely a matter of moral instruction but also of creating sustainable and humane working conditions. Institutions must recognize that investing in TA well-being is an investment in ethical professionalism and, by extension, patient safety [10, 11]. Remedial strategies such as optimizing work hours, providing mental health support, and fostering a culture of support are therefore not merely ancillary benefits but fundamental components of an ethical education system.

The identified gaps in formal ethics education are a critical area for intervention. While foundational knowledge is often provided, the literature suggests a deficiency in practical, integrated, and continuous ethics training [26, 27, 28, 29, 45, 62]. Ethics cannot be taught in a vacuum; it must be interwoven into the fabric of daily clinical and teaching practice. The call for experiential learning, case-based discussions, and simulations is consistent with best practices in adult learning and medical education [9, 31, 38, 41, 42, 43, 50, 56, 57, 61, 63]. This approach helps TAs translate theoretical ethical principles into practical application and develop moral competence. The development of comprehensive ethics curricula that are regularly evaluated is crucial for ensuring relevance and effectiveness [3, 23].

The profound influence of role modeling and the clinical environment on ethical development cannot be overemphasized [34, 39, 53]. TAs learn not just from what they are taught, but often more powerfully from what they observe. If the prevailing culture normalizes behaviors inconsistent with ethical principles, it undermines formal education. Therefore, creating a supportive and ethically sound learning environment requires explicit faculty development focused on professional ethics [38, 39, 40], and a commitment from senior leadership to address unprofessional conduct. Positive role modeling is a silent curriculum that can profoundly shape professional identity [53, 54].

The dual role of TAs as both learners and educators often leads to conflicting demands and role ambiguity. This can

create unique ethical dilemmas that are not always covered in standard ethics curricula. Training programs need to explicitly address the ethical challenges inherent in this dual identity, preparing TAs to navigate situations where their responsibilities as a learner, a clinician, and a teacher may intersect or conflict. Clear guidelines and policies tailored to the TA's specific role are essential [44].

Finally, the emphasis on dialogic feedback and reflective practice provides a powerful mechanism for continuous ethical development [5, 6, 14, 16, 42]. Ethical development is an ongoing process that benefits from regular opportunities for self-assessment, peer discussion, and supervisor guidance. Creating safe spaces for TAs to articulate their ethical dilemmas, receive constructive feedback, and reflect on their actions fosters metacognition and reinforces ethical decision-making. This approach moves beyond passive reception of ethical rules to active engagement and development of moral reasoning. Quality improvement initiatives that integrate ethics into the overall assessment of education quality are also vital [3, 6, 48, 49, 52].

Limitations:

This article is a conceptual framework and does not present new empirical data. The "results" are hypothetical, based on a synthesis of existing literature, and therefore reflect general trends rather than specific findings from an original study on TA professional ethics. The generalizability of these conceptual illustrations depends on the accuracy of the underlying literature and may not capture unique challenges present in specific institutional or cultural contexts.

Future Research Directions:

Future empirical research should:

- 1. Conduct rigorous qualitative studies (e.g., using in-depth interviews and observations) to explore the lived experiences of TAs and faculty regarding ethical challenges and solutions in diverse medical education settings.
- 2. Develop and evaluate the effectiveness of specific interventions (e.g., new ethics curricula, mentorship programs, well-being initiatives) designed to improve TA professional ethics, utilizing longitudinal and mixed-methods designs.
- 3. Investigate the impact of different organizational cultures and leadership styles on TA ethical development and adherence.
- 4. Explore the role of interprofessional education in fostering ethical collaboration among TAs from different health professions.
- 5. Examine how TAs' professional ethics evolve across different stages of their training and career.

CONCLUSION

Teaching Assistants are integral to the educational mission and clinical care within medical sciences. Their professional ethics are not merely an individual attribute but a critical determinant of educational quality and patient safety. This article has conceptually outlined the significant challenges that impede the cultivation of these ethics, including occupational stress, gaps in ethics education, the influence of the clinical environment, and role ambiguity. Critically, it has also proposed a range of effective, evidence-informed strategies to address these challenges. By implementing comprehensive and integrated ethics curricula, fostering robust mentorship and positive role modeling, prioritizing well-being initiatives, and encouraging continuous dialogic reflection, educational institutions can proactively strengthen the ethical foundation of their teaching assistants. Such concerted efforts will not only enhance the professionalism of TAs but will also contribute fundamentally to a more ethically sound educational environment and ultimately, higher quality patient care.

REFERENCES

- **1.** Abdollahi, A, Jangjoo, A, Raveri, H et al (2009). Teaching surgical and urological skills with a health-based approach. Spokesperson Publications: Mashhad University of Medical Sciences.
- 2. Khamis, K., & Njau, B. (2014). Patients' level of satisfaction on quality of health care at Mwananyamala hospital

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- in Dar es Salaam, Tanzania. BMC health services research, 14(1), 400.
- **3.** Al Qarni, A, Al-Nasser, S, Alzahem, A, and Awad Mohamed, M. (2021). Quality Improvement and Patient Safety Education in Internal Medicine Residency Training Program: Exploratory Qualitative Study. Adv Med Educ Pract, 12, 499-506.
- **4.** Soleimanha, M, Heydarzadeh, A, *Haghighi, M, khoshrang, H, Haghparast, Z, Akbari, M. (2013). Assessment of Job-Education Satisfaction in Residents of Guilan University of Medical Sciences. Research in medical science education, 5(1), 45 51.
- **5.** Sependermanesh, Z, Ahmadvand, A. (2015). Prevalence of Burnout in the Residents of Kashan and Isfahan Universities of Medical Sciences in 2012. Research in medical science education, 7(1), 26 -34.
- **6.** Heard, J, O'Sullivan, P, Smith, C et al. (2004). An Institutional System to Monitor and Improve the Quality of Residency Education. National Library of Medician, 79(9), 858-64. https://doi.org/10.1097/00001888-200409000-00011
- **7.** Yaghmaei, M, Heidarzadeh, A, Jalali, MM (2015). Investigating the relationship between the success of assistants in specialized fields in the encyclopedia exam with the promotion and intra-department evaluation exam. Research in Medical Education, 19(1), 18-26.
- **8.** Zamanzadeh V, Abdollahzadeh F, Lotfi M, Aghazadeh A. (2007). [Evaluation of clinical education areas from the perspective of nursing and midwifery instructors of Tabriz University of Medical Sciences in 2006]. Iranian Journal of Medical Education, 7(2), 299-307. [Persian].
- **9.** Jahnshir, AH, Bahreini, M, Banaeim, M et al (2016). Evaluate the effect of holding a simulation course on the performance of emergency medicine assistants in deciding on critical actions. Medicine and cultivation, 26(3), 171-178.
- **10.** Privette, A. R., Shackford, S. R., Osler, T., Ratliff, J., Sartorelli, K., & Hebert, J. C. (2009). Implementation of resident work hour restrictions is associated with a reduction in mortality and provider-related complications on the surgical service: a concurrent analysis of 14,610 patients. Annals of surgery, 250(2), 316-321.