Birjand University of Medical Sciences

Journal of Surgery and Trauma

Letter to Editor

# Reflection in emergency medicine and surgery education

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## Dear Editor,

Scholarly literature is replete with many papers on the topic of incorporating reflection in Medical Education, and Graduate Medical Education (GME) considers reflection as a critical component of learning (1). In the field of Emergency Medicine Education, reflection plays a pivotal role as timely and precise actions in emergency situations are crucial. Emergency physicians and residents need to know how to reflect to handle unexpected situations, think quickly about what to do, and solve challenging clinical problems. On the other hand, the development of technical skills is crucial for surgical residents. Self-assessment, giving feedback, reflection, and self-directed learning are key elements in surgical training. Self-assessment and giving feedback also help to strengthen reflection (2).

### The role of reflection in Emergency Medicine and Surgery Education

The emergency department, by its nature, is a critical setting (3). the emergency physicians and residents are not only faced with a constant stream of complex and often unpredictable situations but also they need to act promptly to save lives. In this regard, apart from the fact that emergency physicians and residents must keep abreast of any developments in their field, they also need to integrate existing knowledge structures with new information to provide optimal care (4). In addition, their ability to make rapid decisions, manage uncertainty, and respond effectively to dynamic situations is paramount. However, the inherent challenges of the field of Emergency Medicine can also lead to emotional and cognitive strain, which can hinder the learning process and impede personal growth (1). This is where the practice of reflection becomes invaluable.

**Citation:** Beigzadeh A, Delzendeh M, Heydari S, Amouzeshi Z. Reflection in emergency medicine and surgery education. J Surg Trauma.2024;12(1):1-3.

***Received: July 11, 2024*** ***Revised: July 13, 2024*** ***Accepted: July 13, 2024***

[ Downloaded from jsurgery.bums.ac.ir on 2026-10-31 ]

[ DOI: 10.61186/jsurgtrauma.12.1.1 ]

In a similar line, in the surgical field, given the busy nature of the surgical department and the number of surgeries, it can be difficult for surgeons to find time for self-assessment and reflect on activities and achievements. However, the process of reflection is an integral part of professional development as a surgical resident and continued growth as a practicing surgeon (5). Reflection is a cognitive process that helps emergency physicians and surgeons reflect on experiences leading to a mastery over tangible and intangible skills of medicine (6). Reflection allows physicians to be more aware of their performance, enabling them to recognize shortcomings and make adjustments to their attitudes, behaviors, and knowledge (4). The importance of reflection has also been highlighted by well-rounded learning theories such as Kolb's experiential learning theory (7) and Mezirow's transformative learning theory (8). By the same token, reflection is a process in which one's actions, decisions, and experiences are examined thoughtfully in order to gain new insights to improve future performance and foster personal and professional development. This process involves critical self-analysis, the consideration of alternative perspectives, and the integration of theoretical knowledge with practical experience (4). By engaging in reflection, emergency medicine and surgery practitioners can develop a more nuanced understanding of the factors that influence their decision-making, the emotional and cognitive responses they experience, and the impact of their actions on patient outcomes (9).

**Techniques for incorporating reflection into Emergency Medicine and Surgery Education**

Integrating reflection into Emergency Medicine and Surgery Education requires a multifaceted approach, and research indicates that reflection is a skill that can be developed (4,5).

In this section, we come up with some techniques of reflection that apply in the field of Emergency Medicine and Surgery Education.

Reflective journaling is promoted in emergency medicine and surgery training to support practitioners in documenting their experiences, emotions, and areas for personal development in a structured manner (10). In addition, reflective portfolios are useful for capturing a learner's experiences and thoughts, which can be beneficial for self-assessment, setting goals, and furthering professional development (11). By the same token, integrating reflective practices into simulation-based training can assist emergency medicine and surgery professionals in evaluating their skills, pinpointing areas needing development, and considering different strategies for patient treatment (12). Last but not least, integrating opportunities for reflection within the core curriculum of emergency medicine and surgery education, such as through case studies, written reflections, or structured reflection exercises, can guarantee that the development of reflective skills is a key aspect of the learning experience (13). In conclusion, reflection is a crucial element in the field of Emergency Medicine and Surgery Education, serving as a powerful tool for enhancing the learning experience and fostering personal growth among medical professionals. As evidenced, the healthcare workforce is a critical asset for organizations, playing a significant role in promoting and enhancing the organization (14). Therefore, this workforce must possess reflective skills to drive organizational improvement. In the emergency and surgery department setting, the ability to reflect can have a profound impact on the acquisition of clinical competence as well as the lives of patients. Medical professionals need to know about the techniques on hand and use them to be able to have reflective practice.

## Conflict of Interest

There is no conflict of interest to be declared.

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[ DOI: 10.61186/jsurgtrauma.12.1.1 ]