Emergency Medicine Teaching of Undergraduate Medical Students in Iraq: A Call for Review of The Current Status

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ABSTRACT

Aims of this document are developing emergency medicine curriculum model for undergraduate medical students through defining the basic requirements of that curriculum. Encourage review of the current educational process of emergency medicine in Iraq and the system of evaluation and assessment of students.

The teaching of emergency medicine is considered now a cornerstone in the medical education and the updates and developments in this field necessitate reconsideration of the methodology and curriculum applied in our universities.

The suggestions proposed in this paper can be first step toward renovation of emergency medicine teaching in Iraq.

BACKGROUND

The core mission of medicine is to save patients’ life, especially in critical situations. The demand for emergency medical physicians, staff, and resources have been exponentially increased in the last years due to an increase in the number of the population, the magnitude of accidents, and extent of critical conditions 1 .

Iraq has a long history of catastrophes with a massive number of causalities and limited resources for emergency medical services to manage such events effectively 2 . Despite that and the insecure environments, our doctors and staff demonstrate a professional and patriotic role in helping the victims all over Iraq. However, in our country, the emergency medical system is still not organized and operated on by doctors from all specialties. The newly graduate doctors are first-line responders and have a key role in this system. Unfortunately, sometimes, there is a lack of supervision by senior doctors to guide the management of critical patients in the first few minutes. It is possible that under-skilled newly graduates are endangering patients’ life by taking first-line positions that necessitate immediate actions 3 . The essential skills of any doctor are to recognize and manage emergency cases efficiently and in a short frame of time 3 . The undergraduate medical education dose not specifically identify emergency medicine as a recognized
H. Use of clinical simulation laboratories to teach medical students how to diagnose and treat medical emergencies. The simulation of the standard emergency room, fully equipped, can be an important education resource for every medical college.

I. Planning in the next few years to establish an academic emergency medicine unit or department within each medical college. This unit or department will be responsible for all emergency medicine-related education and training, and to be run by qualified personnel in emergency medicine.

J. Considering the involvement of external educational and training organizations and bodies (both local and international) in the education of emergency medicine.

K. Establishing a partnership with international medical schools with applied emergency medicine curricula.

Suggested national curriculum design:
The suggested curriculum in this document represents only a first step to develop a national consensus between the experts of medical education in Iraq. The curriculum is aiming to improve critical care education based on international experiences and programs. However, our community specifications must be identified and taken into consideration as a priority in teaching. The training modules should be extended all over the years of undergraduate study to provide the chance for the student to be competent in all the essentials of acute care.

Learning objectives:
The evaluation of medical student should be measurable based on the outcomes of learning objectives. The main points of learning that should be attained are:

1. The clinical skills to manage acute medical and surgical conditions and undifferentiated unstable or unconscious patient.
2. The ability to prioritize and triage of different critical patients in case of mass casualties.
3. Acute care skills, including basic and advanced life support, cardiopulmonary resuscitation, management of shock, trauma, and neurological catastrophe victims.
4. Basic life-saving procedures such as using of an external defibrillator, establishing iv-line, management of airways and endotracheal intubation, care of the wound, fracture, and trauma causalities.

The main clinical areas of training:
1. Medical decision-making.
2. Acute medical illness.
3. Trauma and acute injury.
4. Toxicology.
5. Safety and prevention of injury.
6. Disaster management and utilization of resources.
7. Communication, documentation, and death notification.

The contents of the suggested curriculum:
Skills curriculum
1. General clinical skills:
   a. History and examination
   b. Documentation
   c. Decision-making
   d. Time management
   e. Safe prescribing
   f. Continuity of care
   g. Therapeutic interventions

2. Procedural skills:
   a. Basic life support.
   b. Advanced life support.
   c. Vascular access and iv-line insertion.
   d. Air ways management and endotracheal intubation.
   e. Wound care.
   f. Fracture management.

3. Others:
   a. Communication skills (with colleagues, patients, and relatives), breaking bad news, debriefing and summarization; and teamwork.
   b. Continuing medical education and professional development.
   c. Ethical and medicolegal issues and regulations.
   d. Team leadership, chain of command, triage in massive accidents and time-flow control.

Specific emergency medicine curriculum:
This part of the curriculum needs the collaboration of academic and health care expert in all specialties to develop recommendations for each speciality based on the international guidelines and local expertise. The recommendations can be the basis for the undergraduate curriculum of all emergency conditions.

A. System-based acute conditions:
1. Cardiovascular system.
2. Respiratory system.
3. Neurological system.
4. GIT system.
5. Endocrine system.
6. Genitourinary system, fluid and electrolytes disturbances.
7. Musculoskeletal system.
8. Psychological conditions.
9. Oncological conditions.
10. Toxicology.
11. Eye conditions.
12. Ear, nose, and throat conditions.
13. Dermatological conditions.

B. Trauma and acute injury: including wounds, fractures, and burns of the:
1. Head and neck.
2. Chest.
3. Abdomen.
4. Upper and lower limbs.

REFERENCES