

Development and Educational Objectives in Emergency Medicine

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The term “emergency medicine” has different meanings among international forums. The Collegiate Dictionary, Merriam-Webster, defines an emergency as “an unforeseen combination of circumstances or the resulting state that calls for immediate action.” Few would argue that this definition would not apply to emergency medicine as well.

Differences of opinion about the philosophy of emergency medicine surface when health care providers from different parts of the world meet or correspond through journals. Essentially there are two major models and philosophies of how emergency medicine is delivered throughout the world: the Anglo-American and the Franco-German model. In the Anglo-American model, emergency medicine has become its own strong discipline and career path with board certification. In the United States, specialized staff practices emergency medicine in a hospital-based emergency department. Hence, emergency medicine in the Anglo-American world is predominantly a hospital-oriented specialty. Direct physician presence in the pre-hospital setting is an exception in the Anglo-American model.

The Franco-German model of emergency medicine focuses more on the aspects of medical care outside the hospital setting. The philosophy of the Franco-German model focuses on bringing the physician rapidly to the patient. This is in contrast to the Anglo-American model where the patient is rapidly brought to the physician. Without doubt pre-hospital care and emergency care systems (ECS) are highly sophisticated in the Franco-German system, but this system experiences major problems when the pre-hospital care system meets the in-hospital care system. It is here where the Franco-German model experiences its greatest difficulties. The care becomes more fragmented, except for trauma care, because each medical discipline defends its own terrain. However, the chain of rescue must not stop at the doors of the emergency room because of problems consolidating many medical disciplines into the entity of emergency medicine. The Franco-German model considers emergency medicine as an interdisciplinary activity mostly outside the hospital that does not merit the status of being its own specialty.

It is very important to understand these two different philosophies of emergency medicine when interpreting the literature and identifying the focus of conferences. It should also be recognized when identifying the needs of ones own continuing medical education (CME).

Emergency medicine deserves the status of being its own specialty throughout the world. It is a unique body of knowledge that should be practiced by specially trained groups of people. These groups include physicians, nurses, paramedics and other health care providers who deliver quality care as a team. In order to achieve excellence in emergency medical care it is necessary that a comprehensive and integrated ECS be developed which meets the needs of the respective regions or countries. Features of a mature ECS are supervised residency training programs following a structured core curriculum, board certification, and specialty status recognition. Academic research with journals focusing on a specific specialty will set educational goals and influence the core curriculum of the training programs. Research with databases will give guidance in the planning and implementation of educational activities and will identify the needs for supplemental training of the existing work force. In the management sector, a consequent quality assurance program with an independent peer review monitors adherence to the current and most recent standards of care. Only a mature system with a career path can retain the best and most talented physicians by giving them a perspective for their individual and professional future.

Since emergency medicine deals with unforeseen circumstances which require immediate action, the specialty must deliver the highest level of care 24 hours a day, 7 days a week (24/7). Emergencies happen everywhere and at any time. Readiness and preparedness on a 24/7 basis are essential for quality care of the patient in need. This means that only specially trained staff should work on ambulances, in emergency departments, and in the emergency management sector. Emergency physicians with their special knowledge base play a key role in educating staff in all other settings. Emergency situations also happen on hospital wards and in operating rooms, demonstrating that all nurses and staff members should be regularly trained in Basic Life Support (BLS), Advanced Care Life Support (ACLS), and Pediatric Advanced Life Support (PALS) if applicable. Emergency medicine must also play a leading role in public education. Layperson resuscitation and the implementation of helmet laws are classic examples. Emergency medicine is more than only resuscitating individual patients. It also encompasses an interdisciplinary integration, research of the latest trends, prevention and education. The specialty must also monitor the public's ability of access to medical care and it should deliver clinical preventive services. Emergency medicine is humanitarian aid and public service at its best because it is the first available care at anytime for anyone regardless of the individual's ability to pay for the rendered services.

The educational needs of all of these described areas are ample and emergency physicians play a key role in the research and education of these topics.

We are currently facing new challenges in emergency medicine. Terrorism and aspects of motor vehicle accidents (MVA) are only a few examples. Terrorism is threatening our

societies on a scale that has never been experienced. Terrorist attacks with exploded and collapsed buildings have totally changed tactics in urban search and rescue efforts due to the change in injury patterns of the patients and the extraordinary circumstances of these specific situations. Terrorism has made anthrax and smallpox new threats of old diseases. Detailed and extensive knowledge of signs, symptoms and treatment options of nuclear, biological and chemical contamination is expected of today's emergency physician. Knowledge of new development in the automobile industry has changed the presentation of our victims of car crashes. The deployment of airbags is just one example. Only ongoing research and continuous medical education with testing of the retained knowledge allows us to counter these challenges.

In addition to focusing on all of the above aspects, emergency medicine also has to monitor the care of its own specialty. It has to ensure career pathways to retain its highly trained workforce and it has to monitor development in the workforce. Mechanisms to ensure that all physicians participate in Continuing Medical Education (CME) programs must be in place. In the U.S., emergency physicians have to recertify every 10 years in order to retain their board certification and, hence, their jobs.

Emergency medicine is an extremely stressful discipline. Burnout, fluctuation among the staff, depression, and drug and alcohol addiction are not uncommon problems among those working under extreme conditions 24/7. Education of the emergency staff on how to cope with stress should be offered to prevent mental and physical emergencies among those who help others. The Board of Directors of the American College of Emergency Physicians (ACEP) has approved its own section of Well Being within the College. This section promotes research and education in this field through the collaboration and contribution of its members. Well Being deals with issues of drug and alcohol addiction, divorce and other family related issues, as well as grievances, depression and suicidal tendencies. These issues cannot be taboo; on the contrary an open discussion with educational programs among health care providers are in demand. The emergency health care providers have to recognize and treat these problems of personal imbalance daily, but the provider is by no means immune against them.

With financial resources in medicine becoming increasingly scarce and new challenges threatening our societies, the need for accessible and high quality emergency medical care will increase. Research and education in this field deserve the respect and support of all other medical specialties, the public and law makers.

In summary emergency medicine will globally play an increasingly prominent role as an independent medical specialty and the education in emergency will quickly adapt to the new medical, societal, legal and technical needs of our times.

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