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Emergency medicine optics: development, adaptation and changes in emergency medicine

Aklilu Azazh Tumebo[1*]

1. Addis Ababa University,Addis Ababa, Ethiopia
Correspondence: Aklilu Azazh, email: akliluem@gmail.com
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Emergency medicine and critical care is a delicate care that is open, exposed in daylight, and can't be hidden. The strengths and weaknesses of any hospital service are clearly visible in the emergency department. If there are competent and committed professionals, optimal resources, and a good patient flow system the hospital becomes healthy and so does the emergency department.

Therefore, emergency professionals and hospital management have to assess, identify problems and respond accordingly. To respond to these phenomena emergency professionals and the hospital system should pass through growth and development, adaptation, remodeling, and innovation. Some of these changes and innovations that are taking place in Ethiopia are:

Emergency and Critical Care Medicine professionals' growth and team building

Currently, in Ethiopia there are 100 emergency and critical physicians with in a decade after establishment of postgraduate program. They are working in 20 hospitals: 10 in Addis Ababa and another 10 in the regional hospitals. In addition, they are providing service in 10 ICUs in the country. In the beginning, the focus of the training was only on emergency medicine but after three years the curriculum was remodeled to emergency and critical care medicine. One of the reasons was in the tertiary care centers most patients are critical and get critical care in the emergency room. For instance, one study done in three hospitals in Addis Ababa showed among critical patients appearing to the EDs 32.3% died in the ED, 29.6% were treated and successfully discharged from the ED, 21.3% were admitted to the ICU, 14.4% were stabilized enough to be admitted to non-ICU wards, 1.4 left against medical advice. (1)

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In addition, there was demand from the Federal Ministry of Health (FMOH) and other stakeholders to strengthen critical care competency of the professionals besides emergency medicine ones. In a country of over 100 million people, there were only less than 10 hospitals with ICUs a decade ago, mostly concentrated in Addis Ababa. Recently, the FMOH decided to improve access, equity, and quality of service and established ICUs in more than 70 hospitals.

In the needs assessment survey done before the emergency medicine curriculum revision, there was a clear demand from stakeholders to address critical care medicine issue in the emergency medicine curriculum. In addition to service access and quality improvement, the change in curriculum also partly addresses the career development of the professionals.

In addition to the growth in numbers, development of the internal team function is one of the attributes for better function of the ED. There should be development of a dynamic working system for communication, consultation and decision-making among professionals in the emergency care hierarchy as well as with the in-patient team. Emergency and critical care medicine physicians should also work as a team with professionals in the pre-hospital care system. Pre-hospital medical oversight is one of the potential areas to develop so that physicians can work or oversee ambulance operations. Pre-hospital medical directors influence patient care positively through direct communication (direct medical oversight) with on-scene professionals personally or through hospital base station support (in direct medical oversight) providing protocols and standing orders. (2) However, this is a gap in Ethiopia with ambulances running without appropriate medical oversight and quality assurance.

Systems management

In emergency care, there are unyielding problems like overcrowding that have existed for a long time. It's also common to get unexpected new problems like outbreaks or occasionally pandemics and disasters. ED overcrowding is a universal problem and different quality improvement initiatives were tried in other countries like fast track, the four-hour rule, intense triaging, and introducing nurse practitioners for faster decision because not all modeling approaches are suitable for all situations. (3)

In Ethiopian tertiary care emergency departments, including Tikur Anbessa Specialized Hospital (TASH), prolonged length of stay and overcrowding becomes a longstanding and multiple measures resistant (MMR) problem. Quality Improvement (QI) efforts, establishment of an intermediate ward or short stay ward, and emergency referral facilitation through Addis Ababa emergency coordination teamwork were some initiatives tried to solve this problem. Even though there were short term good results, the efforts didn't sustain because of cost and reduced stakeholders' commitment. Recently, in some hospitals, discussions are underway to have a separate physical environment for patients who stay beyond 24 hours from newly arriving ones even in the same emergency room. The intention is to open ED for newly coming unstable patients and create a less crowded space there.

Therefore, system management, giving focus to the whole facility instead of only ED is needed to address existing as well as emerging problems. This needs advocacy, communication, and collaboration with the hospital leadership and other departments. The one-time solution never sustains and continuous system improvement, adaptation, and innovation are needed. The system should evolve based on the unique sets of problems and emergency care leadership lenses

should have good features of adjusting the focal length and solving the problems.

Resource management

Emergency and critical care medicine professionals directly own the non-human resource management including the infrastructure, medical equipment, and emergency drugs. ED always faces resource shortage because of supply and demand imbalance and wastage of resources. ED flow is dynamic and unforeseen situations can occur at any time. If resources are suboptimal, it becomes impossible to provide the best care. As a result, preventable deaths and disabilities can occur leading to patients' dissatisfaction. To avoid these uncomfortable situations for the professionals and health facilities, a culture of adequate planning, including contingencies, and preparedness has to develop. (4)

In order to get support from different sources, hospitals and emergency and critical care medicine professionals should closely work with FMOH, regional health bureaus, and other organizations. Stakeholders' engagement is important to revise policies and legislation on procurement and other priority areas.

Therefore, the profession along with the emergency and critical care medicine department has unique needs, unpredictable situations, and unyielding problems that need innovation, flexibility, adaptability, and change management.

Conflict of Interest

The author declares there is no conflict of interest.

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