

Libyan Medical Education; Time to Move Forward

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Medical education is a key factor in the progress of any country. The advancement of any nation is based in part on this type of education. Medical education world-wide has improved immensely over the past two decades, having undergone major changes. The progress of developing countries can be judged based on how they incorporate this field of education into everyday life, and how this impacts the healthcare that is provided [1,2].

In Arab-speaking countries, the education system varies. Most of these countries, even the affluent ones with the best oil revenues, have endured difficulties due to their inefficiencies [3]. These are mainly due to the infrastructure of institutions, how financial resources are manipulated, and the lack of educational policies.

In the 1970s and mid-1980s, Libyan medical education was envied by other Arab countries in North Africa and the Middle East who often sought to imitate its system. Since that time, this system failed to stay current and accommodate international standards that other contemporary systems had in place [4]. Libya has invested heavily in medical education by building medical schools all over the country. Furthermore, thousands of physicians have been sent to established universities in Europe and North America over the last thirty years to pursue specialized medical education abroad. Most have come back hoping to join the health system they envisioned. Many were disappointed, however, and regretted their return. Some have left again to practice elsewhere, and some remained, albeit frustrated. This forced difficult questions that had to be answered. This editorial attempts to identify the difficulty that the Libyan medical education system faces and how it could be reformed so that it can achieve its goals with an emphasis on education and research.

Historically, Libyan medical education has been based on the British format of physician training. However, the universities have generally not maintained the same standards as the British. Therefore, Libyan medical schools need evaluation and revision to compete with other similar institutions around the world.

Foremost, medical schools, hospitals, and other research institutions must refrain from appointing any person to a leadership position without a thorough examination of their credentials and educational background. To do less not only tarnishes the reputation of the institution they represent, but contributes to fostering less than desirable qualities in the teaching staff as well as the students. Those chosen for leadership positions in healthcare should be known for their mastery of scientific knowledge and their own personal academic achievements. It is important that

they bring to their role an attitude that encourages collaboration, curriculum reform, and is open to change [5].

Furthermore, curriculum reform is essential in attracting not only an increased number of students, but well-prepared ones who challenge the system, contribute to future development, and may want to build their future careers in Libya after graduation. Currently, the failure rate of medical students is worrisome [6]. Curriculum reform should encourage self-directed learning and the teaching of a system-based care [7,8]. It would be wise to identify goals and strategies to guide curriculum development [9]. Elective courses should include opportunities for students to obtain a broad range of concepts that will influence their future careers and help them to become proficient at teaching the next generation of students [10]. The medical schools must realize the importance of developing scientific research protocols with attention to research principles and ethics. Students must learn to complete research projects that prove or disprove their hypotheses which can then be published for others to share the knowledge. Not only does this help the students to understand the research model they are studying, but it lends credibility to the medical school as well. Clinical trials and participation in multi-center studies should be encouraged. Students should be involved in research early in their academic careers. Journal clubs, research and clinical seminars, and scientific meetings should be regular occurrences.

The recent crises of the Libyan- Bulgarian HIV cases [11] shocked the world. Libyan universities played little or no role. Even related departments such as clinical immunology and microbiology were uninvolved. Such a tragedy provided an opportunity for scientific research development since it would rarely occur that a large number of children would be infected with a single and unique strain of HIV [12]. Ideally Libyan universities should have led the way with research when this happened. Instead other scientists with no connection to Libya led the investigation and gained international recognition for their input. Additionally, they imposed their scientific view in this case [13]. The Libyan health service failed to alert our society about this tragedy. Health officials involved were not open to public during the entire episode and were not questioned about this, which is difficult to understand.

University staff should be encouraged to publish their research in internationally cited periodicals as part of their academic promotion. This will improve the image of higher education and encourage international

contribution which is needed for any successful medical education system. International standards used to rate research, including number of publications and impact factor, should be embraced [14,15]. A recent study published in the Libyan Journal of Medicine analyzed the contribution of Libyan scientists to international publications. Fewer contributions from Libya compared to other Arabic countries were apparent despite the monetary contribution to research [16]. This is alarming and disappointing. A group of independent scientists with strong academic backgrounds should be appointed to monitor the university activities and to offer guidance as the educational system evolves.

The Libyan medical education system needs to recruit specialists in varying areas of medical science. Talented young physicians must be added to the teaching staff for new ideas to be generated and for the school to move forward [15]. We should strive to introduce areas of practice such as organ transplantation, trauma-critical care, endovascular, geriatrics, immunology, infectious disease, genetics, and advanced obstetrical care to a wider part of the country. We must add hospitalists and intensivists so that as patients are admitted to services, we provide the adequate focus that will restore them to health, and we can all learn from each other. We need to reorganize microbiology and pathology departments to become more practical and help with prevention and spread of nosocomial infections, and to guide us to care for those patients with multi-resistant organisms [17].

It is imperative that the Libyan board of medical specialties embraces modernization. We cannot foster the growth needed to provide the care our citizens deserve if we fail to recognize this. We need to enhance efficiency and the overall quality of healthcare delivered in Libya. Clinical health services (particularly secondary and tertiary) should be decentralized and reformed. Academic staff as well as students can share in the development. Currently patients often receive less than desirable care due to the lack of consolidated clinical records. Our ultimate goal should be to develop and incorporate an electronic medical record system that lets all involved share the patient record to improve the quality of care provided [18,19]. Currently even emergency services and burn care lack such methods of communication, which is not acceptable.

Medical ethics must also be evaluated. In a recent editorial, Elkhammas has suggested that medical schools should develop a curriculum to be taught across the country and stressed the urgent need for a code of ethics at all levels. Such codes are also needed for the secretary of health, the medical faculties, and for all hospitals. We need to form ethics committees that are multidisciplinary in all hospitals and teaching institutions [20,21].

Libyan medical education suffers from a lack of synchronization and cooperation among the different sectors. This negatively affects our productivity [22,23]. Academic physicians and scientists play little or no role in planning or supervising national health plans and programs. Our departmental leaders must assume this responsibility and seek out other coveted systems for guidance. The government has often relied on foreign graduates who lack

experience in such problems, and this has damaged the credibility of our country's system [15].

Despite the obstacles that the Libyan medical education system faces, our medical graduates are trying their best to achieve success. Our graduates go on to assume leading roles in highly advanced institutes in Europe, North America and Asia. In the United States as an example, medical education entered a different era following the popular report by Flexner in 1910. Medical education has advanced since then, but several points are still valid today especially when it comes to medical education in Libya. We do need the formation of a medical education council to study the situation and reform medical education in Libya. We have to evaluate every medical school regarding skills, faculty, facility and curriculum. Hence it becomes an obligatory role for all sectors of Libyan medical education to strive to update and accommodate these badly needed reforms.

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| <ul style="list-style-type: none"> ● Assessment of the ongoing medical education system in terms of facility teaching, quality and manpower. ● Reform the leadership appointment method, have search committees with transparent agenda make the selection and recommendations (Curriculum vitae, Interview, Recommendation). ● Increase departmental autonomy and accountability to give them chance to be creative and fully engaged in at the education system. ● Rehabilitation and updating the administration system and introducing modern technology. ● Introduction of independent education center to implement continuing medical education, Continuing professional development, soft skills and personal confidence courses and guide the education curricula. ● Develop guidelines for medical education to be implemented by different hospitals and health education institutions including private sector. ● Creation of an accreditation body to evaluate medical, dental and health related schools and colleges and giving authority to implement recommendations and sanctions. ● Have a transparent timeline to implement medical education reforms. |
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Table 1 Essential Reforms Needed to Improve the Current Libyan Medical Education System

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