

Bridging the Gap: Innovative Approaches to Strengthening Medical Education in Iraq

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Medical education is more than just providing up-to-the-minute medical knowledge and clinical practice. It is an art that involves designing a teaching program that serves the needs of the healthcare sector and community in the near future ⁽¹⁾. Iraq is a country that has been facing numerous challenges in the healthcare sector, particularly in medical education. Proper medical education could be one of the contributing factors to improving health care in this country ⁽²⁾.

A combination of governmental and private universities facilitates the provision of medical education in Iraq. While both types of institutions serve an important role, public universities are more prevalent and may be found in practically every province across the country. In recent years, the number of medical schools in Iraq has increased significantly, with a total of 24 medical schools now available to aspiring healthcare professionals ⁽³⁾.

The Iraqi Ministry of Higher Education and Scientific Research is in charge of overseeing and regulating these medical schools. This governing board guarantees that the medical education given by these institutions meets specified criteria and rules. The ministry's goal is to preserve the overall quality and effectiveness of medical education in the country by establishing rules and monitoring compliance. The six-year medical program in Iraq includes a comprehensive curriculum that prepares students for a career in medicine. Students get intensive academic training, practical clinical rotations, and theoretical study over the course of six years. This multimodal approach provides future doctors with the knowledge, skills, and competencies required to manage the population's complex healthcare requirements of the community ^(2,3).

Recent years have witnessed some significant developments in medical education in Iraq. One of the most important developments is that Iraqi medical schools have been working to update their curriculum and implement the integrated model, but progress has been slow due to various challenges, including a lack of resources and faculty training. However, there have been some positive developments in this area ⁽⁴⁾. The Faculty of Medicine at the University of Kufa was the first medical school to adopt the integrated curriculum in the academic year 2012-2013. In the academic year 2013-2014, the University of Baghdad, College of Medicine and Alkindy College of Medicine introduced the new curriculum, and then after, several medical schools were followed. The new curriculum integrates basic and clinical sciences of medicine with a greater emphasis on problem-based learning, clinical skills training, and community-based learning. The curriculum is designed to better prepare students for the challenges of modern medical practice and to create a more patient-centered approach in healthcare ^(2,3).

More progress has been made in Iraq as a result of the Ministry of Higher Education and Scientific Research's ongoing efforts to improve the quality of medical education. Faculty development initiatives, as well as the acquisition of advanced medical equipment and resources, are among these ways. The ultimate objective of these efforts is to attain global recognition and accreditation for the medical education standards in Iraq ⁽⁵⁾. In the accreditation milestone, the establishment of the National Council for Accreditation of Medical Colleges (NCAMC) in Iraq took place in 2015. In more recent times, this council has successfully met the requirements for eligibility and has been

granted inclusion in the WFME (World Federation for Medical Education) recognition program Map. This particular program is specifically designed to acknowledge and highlight institutions that have earned recognition on the WFME List of recognition⁽³⁾. And, to achieve quality assurance, there has been an increase in international collaboration in medical education. Iraqi NCAMC as well as some medical colleges have established partnerships with international universities and medical institutions, which has allowed them to exchange knowledge and expertise, and to access new resources and technologies⁽⁴⁾.

Despite advancements in medical education in Iraq, there are still substantial difficulties to overcome. One of the most serious challenges is a scarcity of qualified faculty members. The number of qualified faculty members available to support the expanding demand for medical education is insufficient, especially given the large number of medical students. This scarcity is caused by a variety of factors, including the departure of skilled faculty members to other countries, a lack of faculty incentives, and a limited budget dedicated to medical education. As a result, stakeholders in the field of medical education must address this issue by providing enough resources to equip medical schools with modern facilities and resources, as well as developing new techniques for preserving their supply in the long run.⁽²⁻⁴⁾

Furthermore, Iraq has a shortage of teaching hospitals, which has posed a significant barrier to the country's medical education and healthcare. Several factors have been ascribed to this shortfall, including a lack of money for healthcare and medical education, inadequate infrastructure, and the effects of years of conflict and instability. The shortage of teaching hospitals has resulted in a scarcity of practical training opportunities for medical students, lowering the quality of medical education and physician competency. The inability of medical students to develop practical skills and experience has also been hampered by a lack of exposure to a varied variety of clinical cases and limited access to modern medical equipment and technologies.⁽³⁻⁵⁾

Efforts to overcome the challenges hindering the growth of medical education in Iraq require continuous engagement from governmental agencies, medical institutions, and international partners.

Exploring creative thoughts becomes critical in order to properly overcome these difficulties. To overcome the scarcity of clinical training opportunities, simulation-based training emerges as a recommended option. By utilizing advanced simulation tools and high-fidelity mannequins, students can engage in realistic practice of clinical skills and procedures under controlled conditions, facilitating essential experiential learning that would otherwise be constrained⁽⁷⁾.

Another potential solution is community-based medical education, which involves collaborations between medical schools, healthcare facilities, and community organizations. This technique allows medical students to gain experience working in community-based healthcare settings such as clinics, community health centers, and non-profit organizations. By meeting educational requirements, offering exposure to basic care experiences, instilling professional values, and broadening patient care understanding beyond the confines of teaching hospitals, community-based medical education serves as a viable alternative in addressing the scarcity of teaching hospitals on a short-term basis⁽⁸⁾.

The advancement of technology and widespread internet access present online learning as a viable solution to the challenges faced by medical education in Iraq. Massive Open Online Courses (MOOCs) and other online platforms offer students access to high-quality educational resources and lectures delivered by professionals worldwide. This enhances classroom learning and provides additional educational opportunities^(9,10,11).

Telemedicine, another beneficial application of internet technology, enables national and worldwide connectivity among medical students, medical colleges, patients, and healthcare practitioners. Because of this interconnection, students are exposed to a wide range of medical knowledge, scenarios, and experiences, improving their education and training. Peer-assisted learning improves critical thinking, problem-solving, and cooperation abilities through collaborative small-group work. By encouraging information sharing and collaborative problem-solving, this approach cultivates essential competencies necessary for success in medical practice^(9-12, 13).

The World Health Organization (WHO) defines interprofessional education (IE) as a collaborative learning process in which experts from many healthcare disciplines learn, share, and collaborate

to improve collaboration and health outcomes. Students from various healthcare professions, including as medicine, nursing, and pharmacy, are brought together at IE to create a collaborative and patient-centered approach to care. This approach holds promise for transforming medical education in Iraq by breaking down traditional boundaries between healthcare professions⁽¹⁴⁾.

Promoting and providing support for multidisciplinary research is of paramount importance due to the wide-ranging interest in health across diverse academic fields. Significant breakthroughs and innovation in medical education can be achieved by encouraging collaboration among researchers from fields such as medicine, engineering, and computer science⁽¹⁵⁾.

Lastly, building global alliances and partnerships with international medical schools can provide a fresh method to improving medical education in Iraq. These connections may result in student exchange programs, collaborative research projects, and faculty training and development⁽⁸⁻¹⁰⁾.

While there is no one-size-fits-all solution to improving medical education in Iraq, the above-mentioned approaches are just a few examples of potential innovative solutions. Ultimately, the key will be to identify and implement approaches that are tailored to the unique needs and challenges facing medical education in Iraq for the sake of future healthcare.

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