

Medical Education in Afghanistan: Challenges and Policy Implications

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Abstract: Medical education is considered the backbone of future health systems. However, Afghanistan's medical education system is ill-equipped to deliver quality education in the medical training institutions. This article provides insights into existing challenges in the Afghan medical education system. These challenges include infrastructural constraints, substandard recruitment practices, poor learning environment, limited access to updated learning educational resources, shortage of skilled and qualified lecturers, inaccessibility to modern technology, and financial difficulties. This calls for strengthening the Afghan medical education system, highlighting the importance of creating a national policy framework to enhance education quality and ensure academic institutions' sustainability.

Keywords: medical education, problems, challenges, roadblocks, solutions, Afghanistan

Background

Countries with a history of conflict and political upheaval encounter several challenges in the healthcare system.¹ Afghanistan is no exception. For many decades, Afghanistan has been experiencing civil conflict and sociopolitical unrest, leading to the destruction of much of its social infrastructure including the healthcare system.² Afghanistan has some of the poorest health indicators in the region.³ For instance, maternal and child health indicators are among the worst in the world.^{4,5} Moreover, poor access and utilization of healthcare services are other areas of concern.⁶⁻⁸ A critical factor contributing to these poor health outcomes is the state of medical education and training, which directly affects healthcare service delivery, workforce competency, and access to quality care. This has hindered the country's ability to improve healthcare accessibility and patient outcomes.⁹

A well-functioning health system relies heavily on a sufficient and well-qualified healthcare workforce. The World Health Organization (WHO) has cited health workforce shortage as one of the main obstacles to a functioning health system in Afghanistan.¹⁰ Doctors and other healthcare workers are in short supply in the country. Government statistics indicate that there were only 4 medical doctors per 10,000 persons in 2019, with a significant gender imbalance.⁶ More importantly, the insufficient competency and limited capacity of Afghan medical doctors are more pressing issues.² The situation may have been exacerbated following the collapse of the internationally assisted Afghan government in 2021, which resulted in severe funding restrictions for the higher education system in the country.³ Additionally, the persistent sociopolitical instability resulted in the exodus of many skilled and experienced healthcare workers to neighboring and other countries.^{11,12} Given the growing trend of disease burden in the country,¹³ medical education programs demand urgent and comprehensive action.

Afghanistan's medical education system is ill-equipped to deliver quality education in the medical training institutions.¹⁴ Extending this narrative, a recent nationally representative study indicates that the majority of students are not satisfied with the quality of medical education in the country.² Other reports have also noted that medical education in both public and private medical institutions was rated less favorable by students.^{14,15} Strengthening medical training institutions to enhance the quality and quantity of medical graduates is critical to mitigating human resources for

health crises in the country and ensuring access to quality healthcare. Previously, literature has focused on a subset of problems in the Afghan medical education system.^{2,15,16} To our knowledge, no detailed description of existing challenges in the Afghan medical education system has been done to date. Therefore, this article aims to identify challenges and propose solutions for Afghanistan's medical education system. Moreover, this article will provide baseline information for future research.

Medical Education System in Afghanistan

Medical education in Afghanistan is a seven-year program divided into pre-clinical and clinical phases, leading to an M. D. (Doctor of Medicine) degree. This system is more aligned with South Asian medical education models rather than the Bologna framework.^{2,17} The first medical training institute was established at Kabul University in 1932 and extended to major metropolitan provinces (Nangarhar University, Balkh University, Herat University, and Kandahar University) over the years.¹⁵ However, these institutions faced significant challenges, including war, resource limitations, the exodus of skilled and qualified lecturers, and lack of infrastructure, which collectively affected the quality of medical education.^{2,14} Private medical education in Afghanistan started growing in the 21st century, adopting similar educational frameworks but with variations in curriculum delivery, faculty qualifications, and resource allocation. Currently, Afghanistan has over 40 public and private medical institutions offering medical education, though standardization and quality assurance remain critical concerns.²

Entrance to medical education programs in Afghanistan varies between public and private medical institutions.¹⁵ Public medical institutions, which are tuition-free, admit students based on their performance in the national university entrance exam (Konkoo), typically taken after high school graduation. In contrast, private medical institutions follow a competitive admission process, with applicants competing for 100 available seats per institution. Together, these institutions graduate approximately 2000–2500 medical students each year.^{15,18} To be eligible for post-graduate training or obtain professional qualifications, students have to pass a national standardized exam known as exit.²

In recent years, medical education curricula in Afghanistan have been updated, and a national accreditation system for higher education has been established.² Supported by the World Bank, this accreditation system has contributed to some improvements in the public and private higher education system.¹⁹ Additionally, the Afghan government has made efforts to improve the quality of medical education, but these measures have fallen short of addressing fundamental challenges.^{14,15} Despite these reforms, policy implementation has remained weak, leading to inconsistencies in educational standards and competency gaps among medical graduates. As a result, many students complete their medical training without acquiring the necessary clinical and professional competencies, raising concerns about the readiness of new physicians to provide safe and effective healthcare services.

Challenges in the Afghan Medical Education System

Challenges in the Afghan medical education system, as common in conflict-affected countries, include inadequate infrastructure and facilities, a poor learning environment, deficiencies in capacity (physical and human resources), poor recruitment strategies, limited access to updated learning educational resources, inaccessibility to modern technology, and a lack of financial resources.^{2,15,20} These challenges impede the implementation of successful training initiatives crucial for delivering high-quality education.

The medical education system requires a robust infrastructure to support theoretical and practical sessions for all students.²¹ These may include but are not limited to, lecture halls, pre-clinical laboratories, dissection halls, examination rooms, and teaching hospitals.²² While the national higher education policy acknowledges medical education infrastructure as a critical component for improving the quality of medical education in Afghanistan, such infrastructure is often absent in most medical institutions.¹⁴ These infrastructural constraints impede the implementation of successful training initiatives crucial for delivering high-quality education.

Higher skilled cadres are crucial to quality medical education; however, previous studies have reported numerous competency-related concerns among university lecturers in low-income and conflict-affected countries.^{23–25} Despite the earlier efforts to address the professional and academic development of Afghan university lecturers, Afghanistan's higher education institutions are undermined by an extreme shortage of skilled academic staff.²⁶ From 2000 to 2020, the

Ministry of Higher Education (MoHE) made significant investments in enhancing the skills of Afghan university lecturers.^{2,14} However, recent sociopolitical instability and financial recessions have caused many experienced and skilled university lecturers to migrate abroad.¹¹ Moreover, capacity-building opportunities for newly recruited lecturers are scarce due to the absence of appropriate capacity-building programs.³ These human resource challenges are catastrophic to the already undermined Afghan medical education system.

In addition to a well-designed medical education program, good recruitment practices are indispensable for effective education. In most developed countries, medical institutions have admission criteria to select the best candidates for medical education programs.³ However, admission criteria are not standardized in Afghan medical schools. This is a particular concern in private medical institutions where entrance to medical education programs may be less competitive.¹⁵ In addition to these challenges, the recent ban on women's higher education in the country may further marginalize women and restrict their access to medical education.²⁷ This could contribute to an extreme shortage of female doctors in the years ahead.

It is worth noting that medical students in Afghanistan do not have access to an ideal learning environment.²⁰ Several challenges, such as traditional teaching and assessment methods, a non-collaborative environment, poorly organized theoretical and practical sessions, and lack of institutional support, contribute to a substandard educational experience.^{20,28} Research consistently highlights the critical influence of the learning environment on many aspects of medical education.^{29,30} Several effective and innovative teaching methods have been implemented in many medical education programs worldwide over the past two decades.^{31,32} However, Afghanistan's medical education programs still do not consider these learning environment initiatives.

Another critical issue for ensuring quality medical education is access to updated educational learning resources. The significance of having access to up-to-date educational materials in the ever-evolving field of medical education is well-documented.³³ In many countries, access to contemporary and up-to-date resources like textbooks, video lectures, clinical simulations, and medical journals is a key component of accreditation standards.³⁴ Nevertheless, many medical education programs in Afghanistan still use faculty lecture notes as the primary source to help students in their studies and preparation for the examinations.¹⁵ Furthermore, these educational resources are not aligned with exit exam requirements, leaving students to prepare for these assessments independently.²

Equally important is the role of technology in enhancing medical education. It facilitates interactive training tools, remote learning opportunities, improved assessment methods, and global collaboration, making education more efficient and accessible.^{35,36} Despite its transformative potential, access to modern educational technology in Afghanistan remains limited, significantly impacting the overall quality of medical education.³⁷

The Afghan higher education system nowadays is facing financial constraints brought on by the arduous economic conditions in the country.^{15,38} In the past, the higher education system received financial support from the World Bank and other donors to assist with the implementation of several projects.^{14,38} However, the political transition and subsequent pause in financial support from the World Bank and other donors threatens to reverse the significant gains achieved in the past two decades.¹⁵ Furthermore, private medical institutions are also struggling financially, impacted by the ban on women's higher education, taxation, and other factors.^{38,39}

Policy Implications

There is an urgent need to strengthen Afghan medical education systems. However, the country currently lacks a robust policy framework to support the advancement of medical education.¹⁴ Developing a national policy would be the first step to ensuring quality education within the Afghan medical education system.

Starting by identifying key challenges in the Afghan medical education system, policymakers should evaluate the current higher education policies and programs to determine the scope of national medical education policy. To ensure the policy's comprehensiveness, all stakeholders must be actively involved in the discussions and the policy development process. The proposed national medical education policy should be grounded in several core principles:

- **Infrastructure development:** Ensuring availability and accessibility of necessary infrastructure for medical education in both private and public institutions.

- Recruitment standards: Establishing robust recruitment standards in both public and private medical institutions.
- Stakeholder engagement: Actively involve students and faculty in decision-making processes to improve the learning environment.
- Innovative teaching methods: Update teaching methods to incorporate problem-based and case-based learning approaches.
- Capacity building: Plan and allocate resources for short-term and long-term training programs for the capacity building of academic staff.
- Access to educational resources: Facilitate access to the latest versions of reputed medical literature and ensure that educational resources are aligned with exit exam requirements.
- Technology integration: Incorporate the latest advancements in medical education technology to improve learning outcomes.
- Sustainable financing: Develop appropriate mechanisms for financing medical education in both public and private institutions.
- Institutional accreditation: Mandate accreditations for public and private medical institutions to uphold quality standards.

Each of these principles is vital for improving the quality of medical education in Afghanistan. Therefore, these should be considered while developing national medical education policy ensuring the participation of all the stakeholders including the policymakers, university lecturers, researchers, and the students as well as their guardians.

Conclusion

The article highlights the multifaceted challenges facing Afghanistan's medical education system and underscores its critical role in shaping the country's healthcare landscape. Given the fundamental link between medical education and health system performance, addressing these challenges should be a key priority in future policy and program development to improve the quality of medical education in Afghanistan. The policy initiatives should include restoring and expanding female medical education, ensuring infrastructure accessibility, establishing robust recruitment and accreditation standards, engaging stakeholders, adopting innovative teaching methods, building academic capacity, improving access to educational resources, integrating technology, and developing sustainable financing mechanisms. Moreover, further research on the detailed dynamics underlying the quality of medical education in Afghanistan is warranted.

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