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Liter to Editor (Pages: 1139-1141)

The Imperative to Integrate AI Education for Enhancing Clinical Diagnostic Skills in Iranian Medical Students

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Dear Editor-in-chief,

Optometry education is a fundamental pillar of the eye health care system, playing an essential role in elevating service quality and improving public health outcomes. Although Iran's optometry curriculum has made significant scientific and professional strides, targeted reforms are crucial to achieve full alignment with international standards. This article critically evaluates Iran's optometry curriculum through the framework of global competency models, highlighting its strengths and pinpointing areas in need of enhancement. Current evidence shows that the curriculum offers a well-structured program, encompassing comprehensive basic and specialized courses that equip students with foundational knowledge. Nevertheless, urgent efforts are required to expand clinical training opportunities, enhance multicultural education, and integrate cutting-edge educational technologies. In addition, advancing competency-based assessment frameworks, increasing curriculum flexibility, and strengthening international collaborations are vital strategies to further elevate educational quality.

Key Words: Curriculum analysis, Iran, International standards, Optometry education.

*Please cite this article as: Bahreini R. Analysis of the Optometry Curriculum in Iran Compared to International Standards. Med Edu Bull 2025; 6(2): 1139-41. DOI: **10.22034/MEB.2025.548331.1124**

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Received date: Jun. 10, 2025; Accepted date: Sep.12, 2025

1. Advancing Optometry Education in Iran: Curriculum Evaluation and Directions for Global Alignment

Optometry plays a vital role in community health by advancing eye care services. While Iran's curriculum has achieved notable scientific progress, continual development is imperative to secure a stronger global presence (1–4). Furthermore, the rapid pace of scientific and technological innovation necessitates regular curriculum updates to remain current (5, 6).

A thorough review of Iran's curriculum against international benchmarks reveals a robust and comprehensive program that delivers essential core and specialized courses (4, 7). Nonetheless, clinical training must be substantially expanded through increased hands-on opportunities and enhanced partnerships with healthcare facilities to meet international expectations (8–10). Although multicultural education is moderately addressed, it requires deeper integration to better reflect the country's cultural diversity and thereby improve the quality of care (11).

Moreover, the growing adoption of modern instructional technologies and advanced teaching methodologies demands strategic, long-term planning (1, 12). Competency-based assessments are progressively being incorporated into Iranian education systems, and accelerating this process will likely improve educational outcomes (13–15). Equally important, fostering curriculum flexibility and embracing ongoing scientific and medical innovations presents valuable avenues for transformative progress (16, 17).

Furthermore, implementing evidence-based teaching approaches and state-of-the-art technologies will enrich the learning environment. Evaluation frameworks should continue to evolve toward competency-based systems to more accurately measure student capabilities and elevate educational standards (1, 7, 18). International collaborations offer indispensable platforms for knowledge exchange and quality enhancement. Enhancing curriculum adaptability remains key to effectively responding to rapid scientific advancements and dynamic clinical demands (1, 17).

2. Conclusion

Continuous alignment of Iran's optometry curriculum with international standards, thoughtfully adapted to the local context, will create a robust and sustainable foundation for the profession. This progress will not only enhance the quality of optometric education but will also significantly contribute to the advancement of eye care services and the improvement of public health nationwide.

3. CONFLICT OF INTEREST: None.

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